

September 1920

25 Cents

THE NATION'S BUSINESS



Is Saving a Sin?

An apology for property owning
by a man who has worked much
and saved a little against old age.



CONTINUITY

CLARK AXLES

An ideal rear axle delivers an immediate, maximum and continuous flow of power to the wheels—Clark Axles for motor trucks are built to deliver, immediately and effectively, 92% of the engine's power.

CLARK EQUIPMENT COMPANY
Buchanan, Michigan

Also makers of Clark Steel Disc Wheels for Motor Trucks

For Motor Trucks

IRVING NATIONAL BANK New York

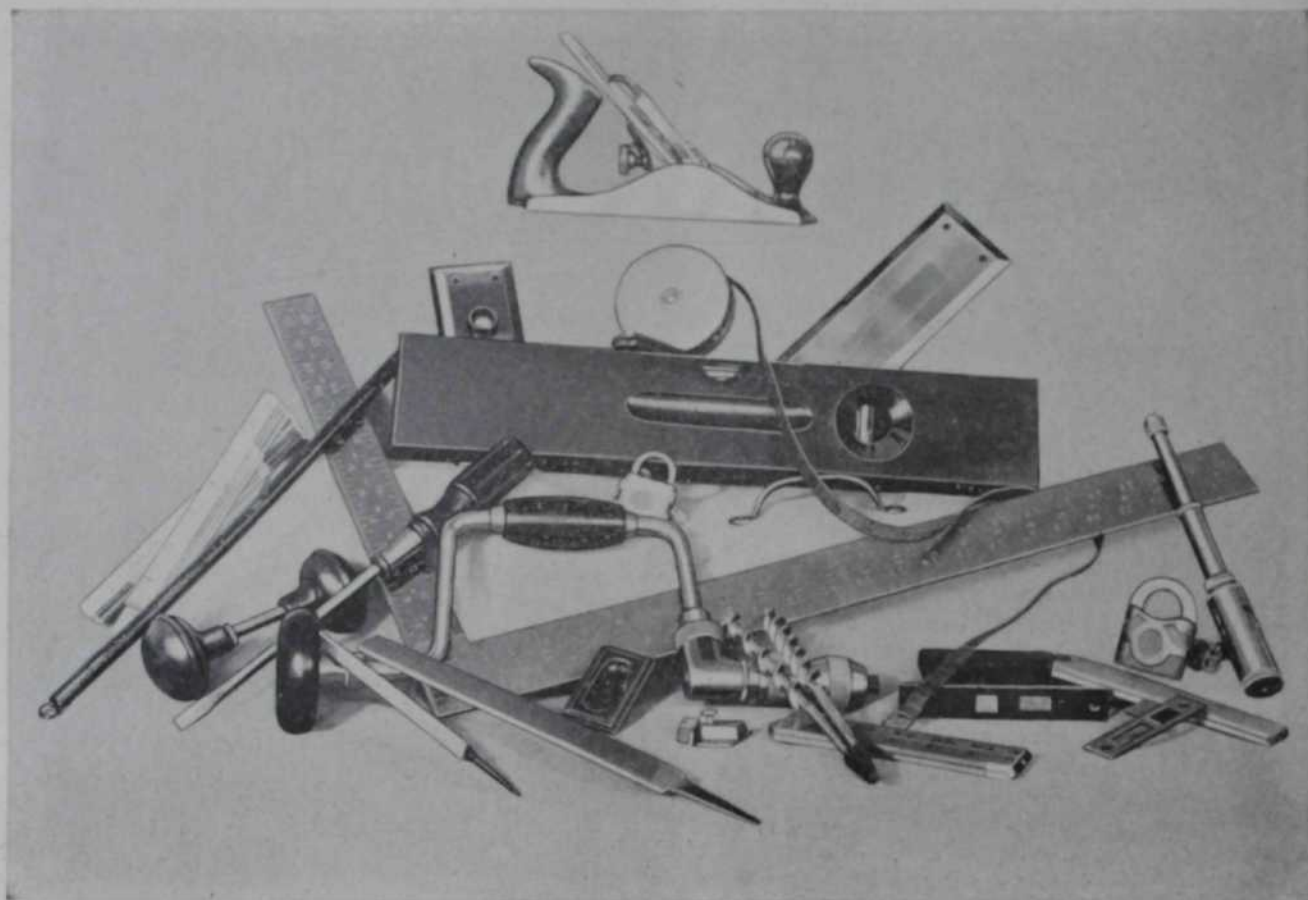
Statement of Condition on July 31, 1920

Resources—

Cash in Vault and with Federal Reserve Bank	\$27,276,265.81	
Exchanges for Clearing House and due from other Banks	42,431,442.89	
Commercial Paper and Loans eligible for Rediscount with Federal Reserve Bank	109,455,889.10	\$179,163,597.80
<i>Other Loans and Discounts</i>		
Call and Demand Loans	11,530,109.49	
Due within 30 days	11,426,275.36	
Due 30 to 90 days	25,289,732.50	
Due 90 to 180 days	30,853,468.26	
Due after 180 days	454,491.51	79,554,077.12
United States Obligations		5,824,951.98
Other Investments		4,839,485.55
Bank Buildings		479,928.00
Customers' Liability for Acceptances by this Bank and its Correspondents [anticipated \$1,441,454.30]		13,963,941.07
Loans made for Customers		1,005,000.00
TOTAL RESOURCES		\$284,830,981.52

Liabilities—

Capital Stock	\$12,500,000.00
Surplus and Undivided Profits	10,869,470.36
Discount Collected but not Earned	1,551,198.56
Reserved for Taxes	1,729,292.86
Circulating Notes	2,262,300.00
Acceptances by this Bank and by Correspondents for its Account [after deducting \$2,466,636.66]	15,405,395.37
Due Federal Reserve Bank	15,500,000.00
Loans made for Customers	1,005,000.00
Deposits	224,008,324.37
TOTAL LIABILITIES	\$284,830,981.52



Opportunity Beckons from the Mid-West

ST. LOUIS, one of the largest hardware markets in the United States, needs plants for the manufacture of small hardware, fine tools, machine tools and tool machinery. Most of these products to supply the great St. Louis trade territory must now be bought in the East. The sale of hardware and kindred lines in St. Louis last year was approximately \$102,000,000. Much of the raw material is shipped from the Mississippi Valley, manufactured in the East, and the finished product again shipped back to St. Louis.

There is no good reason for this take-it-there-and-bring-it-back haul. A Mid-West factory in St. Louis would have an immense local outlet and could economically distribute in all directions to the markets of the Mississippi Valley, South, Southwest, Middle West and Far West. These hardware lines are a part of the following sixteen industries St. Louis is seeking:

<i>Shoe laces and findings</i>	<i>Malleable iron castings</i>	<i>Blast furnaces</i>	<i>Automobile accessories and parts</i>
<i>Cotton spinning and textile mills</i>	<i>Farm implements</i>	<i>Cork products</i>	<i>Drop forge plants</i>
<i>Dye stuffs</i>	<i>Rubber products</i>	<i>Small hardware</i>	<i>Tanneries and leather products</i>
<i>Steel and copper wire</i>	<i>Screw machine products</i>	<i>Locomotive works</i>	<i>Machine tools and tool machinery</i>

A ready market is assured. Splendid opportunities in this field await enterprising men of practical experience and ample capital. You will be interested in the booklet, "St. Louis as a Manufacturing Center." It goes into detail. A letter will bring it. Address

New Industries Bureau St. Louis Chamber of Commerce St. Louis, U. S. A.

"As true as steel"

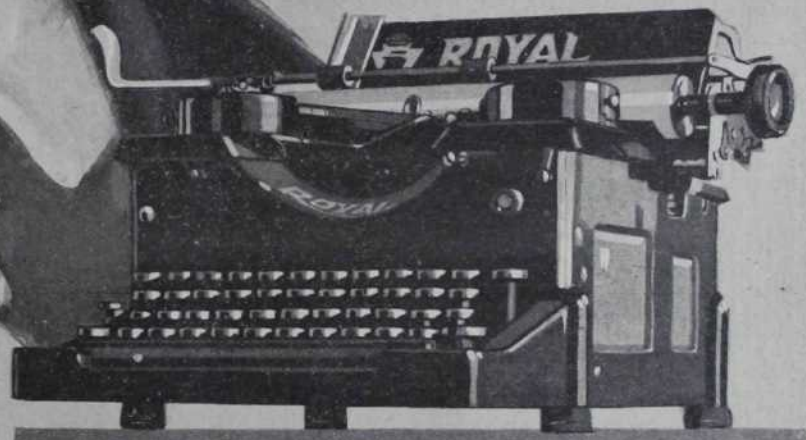
—Shakespeare

IN Shakespeare's day, fine steel meant fine swords. Today, fine steel means fine typewriters.

For fifty years the building of typewriters has progressed. All that science and art, all that ingenuity and patience can achieve is embodied in the Royal Typewriter of today. Nothing has contributed to the remarkable flexibility and endurance of the "Royal" so much as the progress in the manufacture of steel during that period. The closely fitted bearings, the perfectly adjusted mechanisms are only possible as the result of finely tempered and finely fashioned steel. The lightning-like touch—the roller-trip escapement—the perfect press work—each of these, like the Royal Typewriter itself, is "true as steel".

Whether in the battles of old or in the modern battle of business the advantage is with those who have at their command the truest steel—as in the old Damascus sword or the Royal Typewriter of today.

"Compare the Work"



ROYAL TYPEWRITER COMPANY, Inc.

Royal Typewriter Building, 364-366 Broadway, New York

Branches and Agencies the World Over

ROYAL

TYPEWRITERS

Isn't This the Time?

When all business and industrial activities are undergoing a general readjustment—

When Labor is becoming a factor of ever-increasing importance and is seeking a new status for itself—

When Capital is hesitating about which enterprises to support and in which direction to exert its influence—

When Consumers are searching for new markets, lower prices better service and higher quality—

When Competition is striving to secure stronger footholds in the desirable fields and lines—

**Therefore, isn't this the time for
you to make sure—**

1st—That your organization is properly coordinated; that all functions are closely knit; that Labor has its proper status; that management is intensive?

2nd—That you are currently controlling materials, machines, men, and all operations based on facts, not assumptions?

3rd—That through costs you have an actual control and check of all expenditures and factors of manufacture in products completed and in process?

4th—That your methods, processes and equipment are up-to-date so as to insure low costs, attractive prices, and prompt deliveries?

In upwards of forty different industries, clients employing from twenty to that many thousand men are combining our experience with theirs to make sure that they are doing justice to the present opportunities.

Now Is the Time!

WE CAN DESCRIBE OUR PLAN BRIEFLY

C. E. KNOEPPPEL & CO., INC.

Industrial Engineers

"Knoepfel Organized Service"

52 Vanderbilt Avenue

New York

In this Number

Cover Painting by Jerry Farnsworth and Charles A. Dunn

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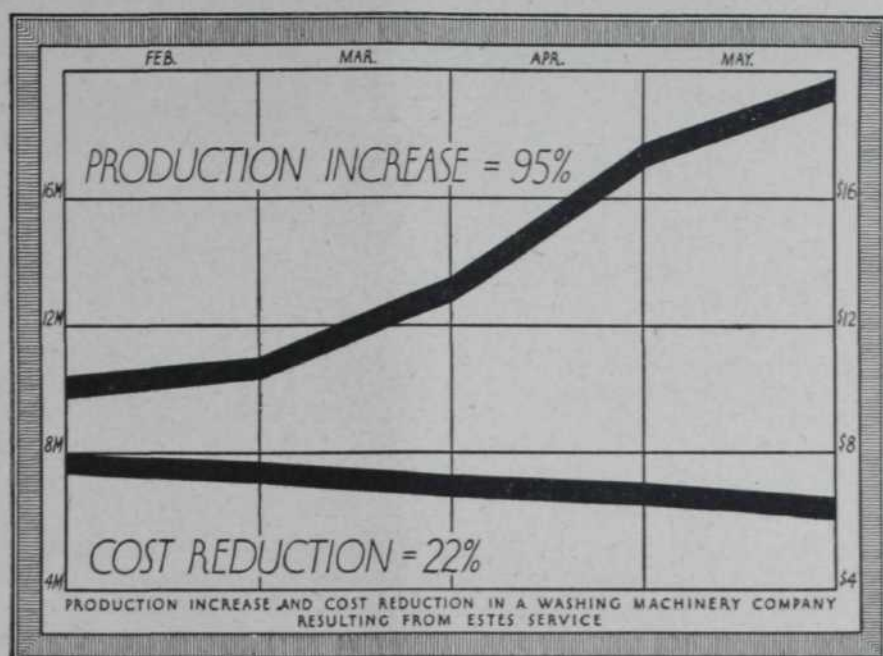
As the official magazine of the National Chamber, this publication carries authoritative notices and articles in regard to the activities of the Chamber.
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Can You Survive the Coming Battle of Costs?

The change to a "buyers' market" is forerunner to a struggle for survival. It warns of a battle for business in which price will be matched against price, cost will compete with cost.

Are you forearmed? Are your costs low enough? Do you know how they compare with competing costs? Are you taking steps to lower your costs—not temporary expedients that will jeopardize your profits by diminishing production, but positive, constructive action that will stimulate your production and yet make it cost less?

The above chart shows graphically what one well-known manufacturer did recently with the help of ESTES SERVICE. Production

up and costs down; at the same time the earnings of employees were increased. For another concern the cost per unit was reduced from \$35.00 to \$25.00, a saving of \$10.00 per unit, or at the rate of \$120,000.00 annually. At the same time production was increased from 800 to 1100 units per month.

These are but two instances of many. In every case, savings have been made without disrupting the organization but rather with a distinct improvement in the morale of employees.

Write for Details of the Estes Analysis and Program

If you are interested in knowing exactly where you stand, what your costs are, what they should be, how they compare with others, what savings and profits are within your reach, write for our special bulletin explaining how you can get this information.

You too, can have such help. You can survive the battle of costs. The Estes plan of "Analysis and Program" shows you how.

L.V. ESTES INCORPORATED

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1503 Century Building, Chicago

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ORGANIZATION • PRODUCTION CONTROL
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COSTS AND ACCOUNTING • APPRAISALS
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For Higher Standards of Business Management

FIRST *in* STABILITY

BEHIND a truck investment, as behind a financial investment, you need STABILITY of value most of all. Without it you have no investment. Without it your purchase is an uncertainty. The White Truck has many different values in and behind it, but they all can be summarized in the one word STABILITY.

Stability of the Maker: The White Company is the foremost truck maker in this country, solidly built up and steadily expanded, with resources and an organization which make for continued leadership in the industry.

Stability of Policy: Since the first White was built, the company has never deviated a hair's breadth from a fixed policy: to build trucks that will do the most work for the least money.

Stability of Product: White Trucks have stood up and kept going day after day, year after year, in all kinds of service and under all sorts of operating conditions. There are a few records of 500,000 miles; a number of 300,000 miles; more of 200,000 miles and many of 100,000 miles, with the trucks still in daily service.

Stability of Quality: Regardless of the cost of material, the quality of White Trucks has been unvaryingly high grade.

Stability of Price: During the past five years White prices have increased a mere fraction of

the average advance in truck prices. Expanded output and steadily improved manufacturing efficiency have stabilized both quality and price in the face of increased costs of labor and material.

Stability of Ownership: The Annual Roll Call of White Fleets in actual service, listing owners of ten or more Whites, has no parallel in the truck industry. It is graphic proof of the most remarkable truck ownership in America; as remarkable for the quality of the ownership as for its extent and steady growth from year to year. The Roll Call contains the names of three hundred and fifty concerns with a total of 12,674 Whites. All together there are 3,691 White Fleets comprising 40,919 trucks, exclusive of single-truck installations.

Stability of Service to Owners: White Service facilities have been built up step by step to keep pace with an expanding distribution of White Trucks. This growth has required years of development, and an investment of millions.

White Trucks are an Investment of recognized earning power, backed by a responsible truck manufacturer with years of successful experience, thousands of trained employees, tens of thousands of trucks in active service, adequate capital and a nation-wide service organization.

THE WHITE COMPANY
CLEVELAND

White Trucks

THE NATION'S BUSINESS

A Magazine for Commerce Business Men

VOLUME 8, NUMBER 9

SEPTEMBER, 1920

The Raise in Railroad Rates

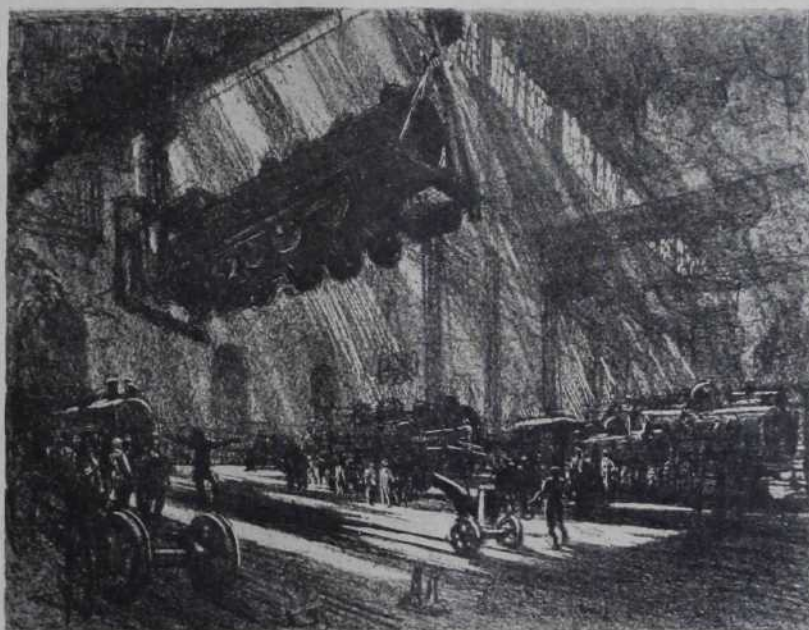
Everyone admitted that it had to come; now that it is here the question to be settled is what the effect will be on prices and industry in general

THE FIGURES with which the Interstate Commerce Commission now deals are of a magnitude that arouses the imagination; for, at the end of February, the commission was directed by Congress to adjust matters in such a way that railroad transportation in the United States would be placed upon a self-supporting basis.

It is a big job, even for the enlarged commission which Congress provided, and the task had to be started before September 1, when the government guarantee ends. The property involved is so vast that in five years the commission has not been able to arrive at its value. On the basis of the progress it has made it now puts down \$18,900,000,000 as a tentative figure, or about the amount of the whole bonded indebtedness of the federal government.

Philosophical statisticians will ruminate over that figure. No one would venture to put the present total value of all property in the United States in terms of current dollars at less than \$300,000,000,000 and, according to the commission's tentative estimate, the value of all railroad property is now not more than 6 per cent of the whole. In 1912 the percentage had been about 9 per cent, in 1900 10 per cent, and in 1890 and 1880 respectively 12 and 13 per cent.

Thus, the value of our national railroad equipment was not holding its own while other values very largely dependent upon railroad transportation were growing—land and buildings rising in value from 50 per cent of the total wealth in 1880 to 67 per cent in 1912. That there was room for increase in the national investment in railroads would seem apparent from the circumstance that California has but 5 and a fraction miles of railroad to 100 square miles of area, Oregon less than 4, such old states as Missouri less than 12, and other western states are as badly off when their railroad development is



Getting a new engine ready for its debut. Much of the added revenues will go into equipment which the roads have sorely needed for a long time. Transportation service,—so efficient and so adequate it will promote, and not limit, the country's agriculture, industry, and commerce,—is the ideal placed by law before the Commerce Commission, and the new rates are the Commission's first response.

listed in this manner, whereas Maryland has 14 miles, Ohio 22, Massachusetts 27, and New Jersey 31.

However interesting and significant in itself, a trend over decades was not before the commission, but rather a very definite and concrete situation. The commission found that during the last year of federal control the operating costs alone had been 88 per cent of receipts in the eastern district, 86 per cent in the southern and 80 per cent in the western. In 1916 these percentages had been 71, 65, and 67. What the percentages for 1919 mean becomes clear when it is recalled that out of the margin remaining there must be paid taxes, both local and federal, interest on bonds, and all that sort of thing, as well as any dividends. That the margin was not sufficient appears from the requirements for these purposes in the years before federal control; in the eastern district 27 per cent of gross earnings was needed for these purposes—an amount that would not by any device fit into the margin

such a situation the new railroad law, enacted at the end of February, directed the commission to increase the income of the roads in such a manner as to leave them $5\frac{1}{2}$ per cent on the value of their properties, with discretion to add a half of one per cent to go for improvements and equipment. After an amount of calculation commensurate with the size of the task, the commission on July 31 announced its method of solving the problem. Its decision would seem to add about 25 per cent to the income of the railroads of the country.

In fact, however, the commission went at the question as a matter of some detail. It first divided the roads into four groups—eastern, southern, western, and mountain-Pacific—denying a request that it also set up a southwestern group. It then reduced the book value of the railroads as shown on the roads' records from \$20,040,000,000 to \$18,900,000,000. Doing its own ciphering, it concluded the eastern roads needed even more revenue than they had asked and the

that was left in 1919.

Actual experience for four months in 1920—two under federal control and two under private operation—made things still worse; for in all the districts costs of operation went still higher, in the eastern district going from 86 per cent to 97.68 per cent, and this without the additional cost imposed by the decision the Railroad Labor Board rendered on July 20; that decision added \$314,000,000 to the expenditures in the eastern district, carrying the total percentage of operating costs to operating income to something like 110.

If the case were to be stated in another way, it might be said that since 1916 the railroads in the eastern district had been granted an increase in rates that enlarged their income by 36 per cent, whereas their expenses had been raised by 102 per cent.

In contemplation of

southern and western less than they had estimated. In reaching these conclusions the commission followed the procedure of the new law for cases including intrastate rates, by having representatives of state commissions sit with it in hearings.

The commission would have preferred to determine the commodities, sections of the country, and even the individual rates which could best bear the burden of the necessary increases, but finding itself too pressed for time adopted percentages.

The figuring then passed from the commission to the officials of the railroads who have to devise the tariffs, and to the public. The former are too busy on a huge piece of detail work to spend much energy in statements. The latter is of many minds. This is not altogether unnatural since the exact increases in particular rates have not been worked out.

The mathematical undertaking before the railroads in compiling the new rates has been recognized by the commission, which by a special ruling authorizes them to put the new rates into effect by filing schedules in which the first column will show amounts beginning with the old lowest rates and the second column will show the corresponding new rates. To find a new rate, a shipper will in the usual way ascertain the old rate and then look at these parallel columns to discover what he is to pay.

This is merely a temporary expedient. Before December 1 the roads are to file at least one-sixth of their tariffs showing the new rates in the customary way, and each three months afterward are to present at least another sixth. The complete new tariffs may consequently not be in print for a year and a half.

The Effect of the New Rates

MEANWHILE, something can be said in a general way about the effect of the new rates, from the point of view of the passenger and the shipper. In June, 1918, the passengers in some parts of the country had, by the order of the director general of railroads, accepted an increase of 50 per cent, and traveled more than ever. With the rates to be put into effect this month a traveler will not pay, even when riding in Pullmans, as much as British roads are proposing as their new rate, four cents a mile.

Since only publication of the railroads' new tariffs will show the actual rates, a cautious statistician in the interval has to stick to basic figures. Following the lead of the commerce commission, he starts with 1916, when the railroads of the country received an average of 2.006 cents for each passenger hauled a mile. This "revenue per passenger per mile" is the unit of income. Between 1916 and 1920 there was a total increase of 22 to 27½ per cent, according to the section of the country, in the rates per passenger mile. If the increase for the whole country was 27 per cent, the result in 1920 would be 2.548 cents a passenger mile, and the increase now permitted by the commission would make it 3.057 cents.

That would be the basic rate which everyone would pay if every traveler paid alike. But everyone does not pay the same rate; there are reduced fares for particular occasions, and all that sort of thing, and rates over the average for the ordinary traveler. For instance, a person who uses a lower berth in a sleeping car will have to add half its cost in his estimate of the price of transportation.

With an increase of 20 per cent in existing fares, a person traveling from the following

cities to Washington after August 26 would apparently pay for transportation and lower berth, with the corresponding present charge indicated in parenthesis:

New York	\$12.53 (9.82)
Philadelphia	9.04 (6.91)
Chicago	38.89 (31.03)
Cleveland	22.07 (17.64)
Kansas City	59.59 (47.66)
Seattle	144.79 (115.41)
Los Angeles	147.83 (117.90)
Phoenix	132.59 (105.87)
Galveston	79.01 (62.85)
Mobile	50.22 (40.04)
Savannah	31.51 (25.01)

Inspection of this table makes it clear that for transportation and a lower berth a traveler may count on paying an increase of 25 per cent. In such a calculation, and in the figures set out above, the war tax collected by the government has no place; for whatever the sins of the railroads they can scarcely be held responsible for the tax.

However essential, passenger travel does not have the importance of freight traffic. That traffic is stupendous, being the results of the industry and commerce of a great nation; in 1919 it was equivalent to 362,877,000,000 tons carried one mile. In 1870 the cost of railroad transportation per ton mile was 3.02 cents; in 1917 it had been brought down to less than three-quarters of a cent, exactly 0.715 of a cent. One-quarter of a cent would seem to measure the increase now authorized.

Like passengers, however, freight moves at different rates, and when a seeker after exact knowledge turns his hand to estimates of increases in actual rates on specific articles he meets problems which only the railroads' tariffs and their economic consequences can make plain. For the sake of speculative exercise, however, one may begin with milk, which is to yield an increased revenue of \$8,600,000 a year.

Against the cow no charge of decreased production has been brought, and the Department of Agriculture estimated that in 1918 the collective cows of the nation produced 11,044,000,000 gallons of milk. What portion of that lactic flood goes aboard a railroad car it is hazardous to guess, but there seems no risk of inaccuracy in saying that the present cost of railroad transportation cannot exceed one cent in the price a city dweller pays for a quart bottle. The commission consequently cannot have added more than two-fifths of a cent to the price of a quart of milk in eastern cities, and on the basis of actual rates the amount is likely to be near one-fifth of a cent, at most.

The difficulty about being accurate in estimates arises out of the nature of things. A city obtains its milk supply from many different railroad stations, with different rates. Somewhere along the line of supply is a station or line of stations the rates from which affect prices. In order to compete, shippers at more distant stations may have to meet the resulting prices.

There is the same state of affairs with reference to other traffic. Anthracite coal moving from different mines to Boston, New York, Philadelphia or other consuming centers takes different rates. To say that the highest rate to Boston has been \$3.20 a ton and hence the new rate may be \$4.48 may prove wide of the mark. With the best grades of steam sizes of anthracite selling around \$5.50 at the mines, and the highest rate to Philadelphia taken into account, one may guess that a Philadelphia manufacturer who has paid \$7.80 for such coal on his railroad siding may after August 26 pay \$8.70, or an increase of 12 per cent, but the Philadelphian may

manage to do better. If the manufacturer is in Boston and burns bituminous coal from the Clearfield district in Pennsylvania, has no contract with a mine and buys in the open market, he may pay at the rate of \$11.50 at the mine, with \$3.30 added for rail transportation, thus finding his present cost \$14.80; with the new rate in effect his total cost may be increased by 9 per cent.

To the possible effect of the increase upon shipment of live stock from the ranges to packing centers the commission itself has referred. It cited the rate of 55 cents a hundred pounds on cattle from Montana to Chicago, one of the highest rates now applicable to a heavy movement, and remarked that the increase of 18 cents would mean about one-fifth of a cent a pound.

As for lumber, it has been estimated that the total revenue to the railroads for hauling it has been about \$250,000,000 a year. If an unofficial estimate is correct, that the advances allowed by the commission average 34 per cent for all parts of the country, and it could be assumed that such an average applied evenly to lumber, the increase on lumber would be \$85,000,000 in the entire aggregate.

On Raw Materials

THE considerable increases will appear in raw materials and other low-priced commodities moving in large volume. Upon articles of high value the change in rates will often be so small as to be less than the smallest coin we have. Six mills will be the amount on a pair of men's shoes carried from Boston to Philadelphia. Upon a pound of butter brought from Chicago to the Atlantic seaboard it will be three mills, and half a cent a dozen on eggs that travel the same route.

Any figures are necessarily haphazard. All of them are based upon assumptions of one sort or another. The railroads have merely received permission to take a certain course, with a maximum as their limit.

In fact, in such a case as the commission has had before it, involving all the rates among thousands of stations and along a quarter of a million miles of track bearing the traffic of 107,000,000 people, there must be uncertainty about the commission's own calculations regarding the returns from the rates it has indicated. The outstanding question now is how far the commission's computations will prove to be accurate.

That an increase in rates is necessary was agreed upon all hands. The director general of railroads pointed out the necessity when he left office. The need was declared by Congress. At hearings before the commission representatives of many industries laid emphasis upon the urgency of more revenues to the railroads in order that they might provide more service. While the commission was considering the case it had to take special action to provide cars for coal even at the expense of important industries, and the demand for grain cars in the west has been insistent for months. In a referendum vote a year ago the organizations in the membership of the Chamber of Commerce of the United States declared overwhelmingly for an adequate return to the roads.

A mere glance at the price indices which are often used to show how the world has gone of late will suggest that a real advance in revenues has long been due the railroads. While the roads in the eastern district were obtaining 36 per cent of increase, between 1919 and 1920, the index of wholesale prices published by the Bureau of Labor Statistics ascended from 124 to 253!

Helping China to Help Herself

Winning the Far East to the New Consortium was full of interest and incident—as, for example, the threat of Chinese students to stone the American banker's hotel windows

By THOMAS W. LAMONT

Of J. P. Morgan and Company

INTERNATIONAL PARTNERSHIPS, for banking or for war, are not easy to handle. One of my favorite stories is of Marshal Foch who has always said that Napoleon was his model.

"But," added the Marshal, "now that I, Ferdinand Foch, have fought at the head of a coalition, I have less respect for Napoleon, who had only to defeat coalitions."

The new consortium for China, made up of banking groups from the United States, Great Britain, France and Japan, had agreed that the body should be a full partnership, that not only future options but concessions already held and on which substantial progress had not been made should, so far as possible, be pooled with the consortium and that its operations should serve to prevent the setting up of special spheres of influence on the continent of Asia. It was agreed also that the group's operations should deal only with loans to the Chinese government or to the provinces of China, or loans bearing governmental guarantees, and of a character sufficiently important to warrant a public issue.

The consortium met in Paris in May of last year and organized, its agreement to be subject to the approval of the respective governments.

In the case of Great Britain, France and the United States, this agreement was approved without change. The Japanese government directed its banking group to declare that certain portions of the Provinces of Manchuria and Mongolia should be reserved from the scope of the consortium. These reservations as to Mongolia and Manchuria were clearly inadmissible to the western banking groups, as being opposed to the idea of a free and full partnership. They were, as it appeared, equally inadmissible to the governments of the United States, Great Britain and France.

Correspondence Didn't Help Much

THERE followed a long diplomatic correspondence, with the idea of securing Japan's recession from her position. Little or no headway was made, and I was requested by the American banking group, with the approval of the British and French banking groups and also with the approval of the State Department at Washington, to go to Japan and find out definitely whether the Japanese banking group intended to enter the consortium on the same terms as the other banking groups.

I was in Japan throughout the month of March last, and then again upon my return in May from China, before sailing for home, I spent a week at Tokyo. As a result of a better understanding Japan withdrew her reservations *in toto* and the Japanese government authorized its banking group to enter the consortium without qualification.

Japan's change of attitude was of course most gratifying, and it served to make clear several interesting points as to the present financial and political situation in Japan. I found from the start that the members of the Japanese banking group, which comprised eighteen of the leading institutions in the country and a great majority of the leading men of

How It Was Done

THE bankers' consortium that was to help China surmount her commercial difficulties was face to face with failure. In Japan there were certain stubborn gentlemen who insisted that their country should not enter the consortium unless portions of the provinces of Manchuria and Mongolia were left out of its scope. Besides, there was much distrust in China.

The task of unraveling the tangle fell not to a diplomat in the strict sense of the word, but to a banker. Thomas W. Lamont, of J. P. Morgan and Company, was asked to go to Japan and China and see what could be done.

His success has been reported in the daily papers, but the story of how he did it, told in his own language, is worth presenting. It is a record of "dollar diplomacy" of which America has reason to be proud.—THE EDITOR.

affairs in Japan, were strongly for the consortium and greatly desirous that Japan should become a member of it without reservations. Early in my visit, too, the government, with Premier Hara at its head, stated to me its conviction as to the wisdom of withdrawing the reservations.

Through the instrumentality of our ambassador, Roland S. Morris, I was brought in touch with all the leading members of the cabinet and of the powerful diplomatic advisory council, who gave me private assurances of their adherence to the American formula of the consortium. But there was another element in Japan which, for the moment, strongly opposed participation by Japan without reservations. That was described to me by certain Japanese as the so-called military party. That element clung to its determination to have the record show some special claim for Japan in Manchuria and Mongolia. Its final withdrawal from this position was due, I believe, to the joint influence brought to bear upon it, first, from its commercial and banking interests at home and, second, by the consistent and unyielding attitude on the part of the American, British and French governments.

I found in Japan that on certain points there was sincere misunderstanding, which was dispelled by our discussions in Tokyo. We made it clear that the American, British and French banking groups had no intentions with respect to Manchuria and Mongolia that would serve to threaten the economic security or national safety of Japan. Further, we were able to specify certain feeder, or branch-line, railway projects in South Man-

churia upon which substantial progress had already been made by the Japanese and which, in accordance with the original understanding reached at Paris, should fall outside the scope of the consortium. Japan, in waiving her reservation regarding Manchuria and Mongolia, recognized that they were of no real value to her and, if persisted in, would only serve as an inevitable bar to her entering the partnership with the western nations—a partnership calculated to prove of more benefit to Japan's commercial interests than to those of any other nation.

After having gained the informed assurance of the Japanese Government that it would authorize its banking group to enter the consortium, I proceeded to China for the purpose of observing conditions there.

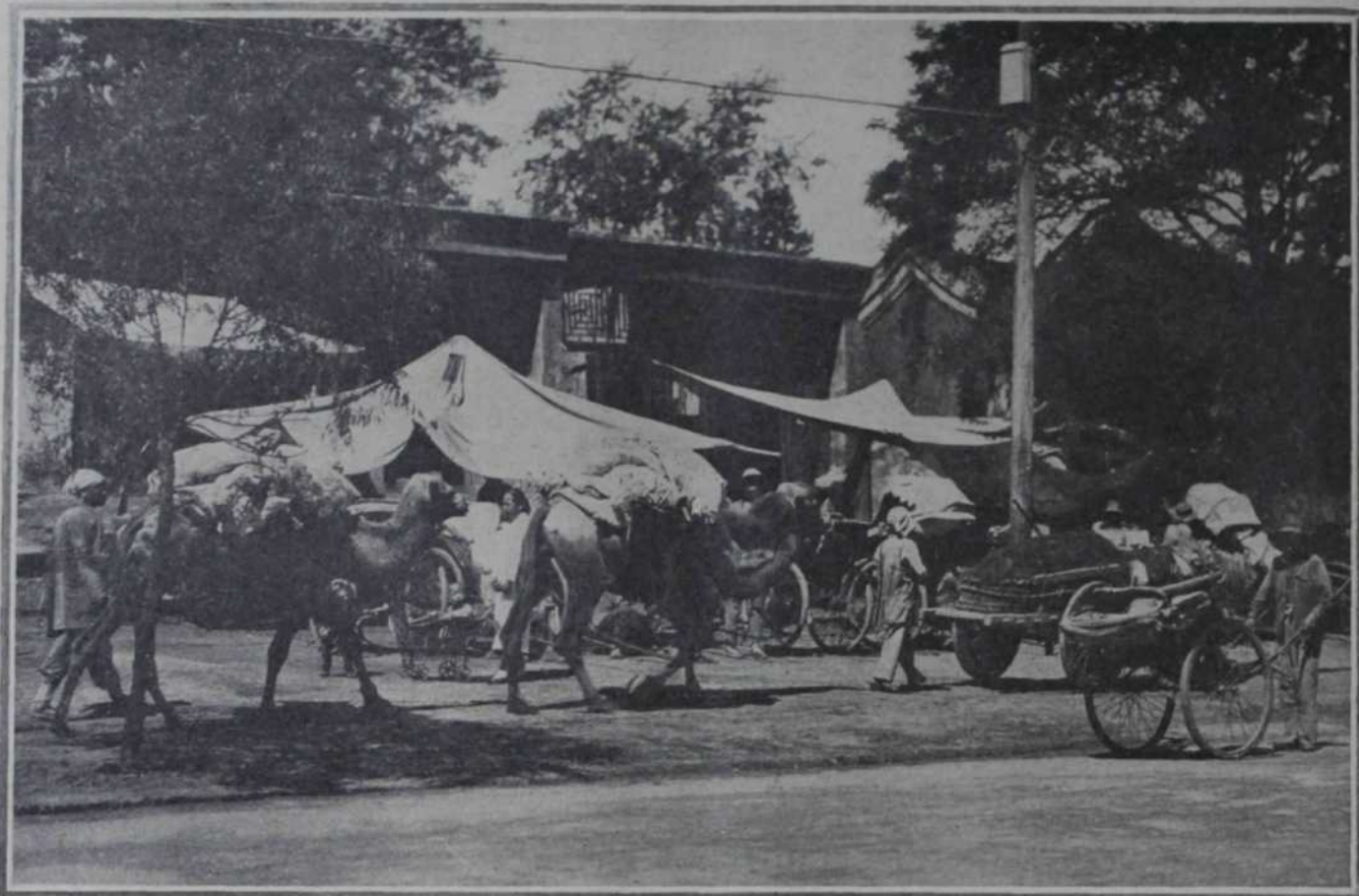
In China I spent more than a month that was full of extraordinary interest and found several situations of unusual import. First, it became clear that some element—the Chinese said that it was the same one that in Japan had delayed Japan's entry into the consortium without reservations—was now endeavoring to block our path and, by inspiring antagonism on the part of the Chinese, bring about the failure of the consortium. America, and therefore the American group, commands a greater degree of confidence among the Chinese people than any other nation or group. The reason for this is plain. The United States has refrained from seeking territorial concessions in China, and it has striven through the years for the preservation of China's territory and sovereignty, for the maintenance of the open door for all trade.

But, as I have just said, there began and continued throughout my stay in China an active propaganda against the consortium, against America, against the American group and against myself. This propaganda was a powerful illustration of the necessity for joint action in China.

How the Propaganda Worked

THIS particular propaganda was conducted partly through circulars, also through the few English printed journals said to be in the control of the Japanese. It was chiefly apparent in the organs of the vernacular press conducted in Japanese interests. In these newspapers, scattered throughout all the leading cities in China, the most astonishing misstatements as to the consortium were constantly repeated. Guild and parliamentary memorials, manufactured on the basis of these falsehoods, were addressed to me and reprinted in the public press.

Accordingly I found it necessary to meet these attacks in the most direct way possible. I had previously determined that when I arrived in China it was my business to keep my mind open and my mouth shut. But it became necessary for me to make a considerable number of public addresses and communications to the leading newspapers; also to receive a very large number of Chinese, both in their private capacity and as representing certain influential groups in China. To this general end, first in Shanghai I explained



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Here are some of the ancient transportation equipment of China as seen on the streets of Peking. It is mostly coolies, camels and carts. China, with 400,000,000 people, has 6,467 miles of railways against the 266,381 miles of the United States whose

population is something over one hundred millions. The new consortium is to help the Chinese government in developing transportation systems and other enterprises of a fundamental nature. But it will interfere in no way with private banking.

in great detail the principles, the purposes and the workings of the consortium at a large tiffin given by the American bankers; at a dinner in the same place, given by the American and Chinese Chambers of Commerce, at which several hundred persons were present, half of them being Chinese; at another tiffin given by the Chinese Bankers' Association of Shanghai and vicinity; at similar luncheons and dinners at Peking and at large meetings of the representatives of the Chinese press, held at both Shanghai and Peking.

Of course, I discussed the same matter privately with any number of journalists, educators, men of affairs and officials of the government, both past and present.

Shortly after my arrival in Shanghai I heard that the students' union, incensed by the report that I had come to China to negotiate a large loan to the present government of China, which the students violently oppose, and by the knowledge that I was trying to arrange with the Japanese, whom the students were boycotting, to join the consortium, had decided to make a demonstration against me and to stone the windows of my hotel. I sent word to the students that before carrying out their plan I thought it would be a good idea for us to talk together. Saner counsel prevailed among them and they chose about 30 delegates, one third of them women, to call on me. We had tea and then spent two hours discussing the consortium. I never met a keener, more eager, intelligent group of young men and women. They were strongly opposed to their own administration, very criti-

cal of the Japanese, whom they accused of seeking to debauch their government, and generally fearful of foreign domination.

We argued back and forth the question of the consortium, and when we finished they seemed to have become convinced it would be better to have the Japanese join with the bankers of the other leading nations in a joint effort to help China. We succeeded, too, in making it clear that the consortium had no plans for coming to China and exploiting it, or of foisting any great scheme of development upon the country; that we did not intend to come to China at all except at the earnest desire and with the cordial cooperation of the Chinese people; that unless they were convinced of the utility of the proposed consortium, certainly it would not attempt to function.

I was told later that this conference with the students' union in Shanghai had aroused considerable dismay in the government at Peking, and that when it received the report of the conference it released from prison a number of students confined there.

This last episode, if true, will give some idea of the feebleness of the central government at Peking. Taking China as a whole, it is such a law-abiding, peace-loving and industrious community that locally it does not seem to require much in the way of administration. The towns and cities by themselves appear to move along with local and family government that manages to keep the peace and to make both ends meet. Of course, from the western point of view, there is an infinite lack

of modern phases of municipal government, that is to say, of any local improvements, sanitation, public education, etc. Aside from these things, important from our point of view, but not important to Chinese civilization which, for several thousand years, has managed to worry along without them, there is very decent local government.

When, however, it comes to the central government, the situation has many serious aspects. The administration, as it appeared to me in Peking, was weak in purpose and personnel and limited in its authority. This lack of capable and patriotic men in the central government is what gives to western eyes their exaggerated idea of disorganization in China.

Yet we may not hold the Chinese as solely responsible for their own ills. Many Japanese liberals declared to me that the policy of Japan had served to weaken rather than to strengthen China. The way that an ex-Premier of China, a liberal, by the way, who some years ago was supplanted in office by one of the militarists, put it to me was this:

"Since the outbreak of the great war, especially in the year 1917, China has borrowed no less than \$250,000,000, silver, from Japan. What has been done with this vast sum of money? Absolutely nothing! And where has the money gone to? Mostly into the pockets of some militarists and of those individuals who are now shouting against the new consortium. These men have developed an appetite for Japanese money and are looking for more. When they hear, as they do, that

the new consortium will lend money only for constructive purposes, and, moreover, will insist upon such supervision as will insure the money being spent for such purposes, they naturally oppose the consortium. These men are being backed by a certain element in Japan. Thus they are enabled to buy up newspapers and start propaganda in opposition to the new consortium, but not for a moment do they really represent our public opinion."

No actual constitutional government at present obtains in China. There are two parliaments in existence, each claiming the other to be illegal. The *de facto* government at Peking functions by virtue of its inheritance from the Manchu regime, followed by the presidential administration under Yuan Shih Kai. He had an ambition to become emperor and form a new dynasty and therefore not wishing to be hampered by constitutional limitations he prorogued parliament prior to the adoption of the final constitution. The southern group maintain that had its passage not been blocked by Yuan the constitution as written would have been surely adopted by parliament as the will of the people. Among other things, this constitution provided that no foreign loans should be contracted by the government without parliamentary approval.

It is frequently asserted that a majority of both the present parliaments have been named by the Tuchuns or military governors. These men today constitute in China the real stumbling block to effective government, and until they can be controlled or reconciled no so-called peace will be effective. These Tuchuns derive their strength in part from the local provincial revenues which they collect and squeeze and partly from spasmodic grants made by the Peking government. The Tuchuns and the Peking government spend so much upon troops that until there has been disbandment of at least one-half of the troops, thoroughgoing financial reform is impossible.

This whole situation is difficult, for it constitutes a vicious circle. For instance, as I have just pointed out, the government deficit cannot be wiped out until disbandment of the troops takes place, thus doing away with the extraordinary military expense. On the other hand, disbandment cannot be accomplished without paying off soldiers' arrears. The government can't borrow until it gets rid of its soldiers and it can't get rid of its soldiers until it borrows.

Not With the Sword

THE solution, as it would appear to me, is not the military intervention or occupation of certain cities, which a few of the Japanese militarists advocate. If, on the other hand, the leading Powers should make to the present Peking government, to the southern government and to all factions in China, including the Tuchuns, strong diplomatic representations, stating that all this nonsense of an opera bouffe warfare must be dropped and the government get down to business, I am inclined to believe that the result would be surprising in its effectiveness.

I took repeated occasion in China to make it clear that until effective reconciliation between the factions has been reached, the consortium will be unable to function upon any extensive financial scale. In the last few weeks, since my return from Peking, the government has made several important cabinet changes tending materially to strengthen the situation.

The western governments can, in the long run, place great reliance upon the integrity and sobriety of the Chinese people and can find in them elements of strong cooperation—can encourage them in the development of a more

stable government. I was greatly impressed with the growth that there has been in the last few years in education, the study of political institutions and of government by the students at the various universities and the liberal-minded men of affairs.

These men are the hope of China today. They are anxious, nay, eager, for the consortium to begin its work there. They declared to me that in its operations lay China's only hope, and, if ever a people deserved our effective friendship, these are the ones. In a material way they will repay it a thousand-fold. China has untold wealth in her natural resources. It requires only stabilization of political conditions there in order to develop these resources and make the country perhaps the greatest in the world in actual, as well as in potential, wealth.

As to Japan, I have confidence that her people will enter fully into the spirit in which the new consortium has been formed and that her bankers will carry out scrupulously the compact they have made with their partners and associates of America, Great Britain and France. They are anxious to cooperate with the other participating powers.

Coal Short? Look Overseas

While England is turning out but 80 per cent of her pre-war yield we are 15 per cent over 1913; France is short a fifth of her needs

COAL IS POWER, in more senses than one, and in its possession we are among the fortunate people of the earth in these post-war days. Germany hit France hard when it set about destroying France's coal mines. Besides, like all the rest of the world, after the railways have been subjected to the strain of war, France has a transport crisis which, upon coal production, has exactly the same effect as in other lands. This year, after getting all the coal England can spare, counting on 3,000,000 tons from the United States, and drawing on Belgium, France will have 36,000,000 tons less than the 90,000,000 of her absolute requirements. It is small wonder that at Spa the French premier was adamant in exacting German compliance with its promises to deliver coal at a rate of 16,000,000 tons a year to France. Even so, France faces a coal deficit this year of 20 per cent of her needs.

In Germany transportation again intervenes, and the coal crisis lays a heavy hand upon all activity. It is not so long ago that such train service as war-racked roads were capable of yielding was curtailed, because of lack of coal. As for industries, they are rationed in coal. The cement industry, for example, receives 70,000 tons a month, whereas it had 300,000 tons in pre-war times; on its ration it produces 100,000 tons of cement in the face of a reputed need for 1,100,000. Rationing is obviously no more conducive to economic productivity than to the well-being of the human body, and in this case it is coal-rationing in a country which among European nations used to be second only to England in coal output.

Italy's whole future may turn upon the coal she gets. Having no coal-bearing areas, Italy has looked chiefly to England. The collapse of the coal industry in England, where it has been government-controlled much after the fashion of our railroads, has left Italy to look to us, even at the expense of the long haul across the Atlantic and half the length of the Mediterranean.

As for England, the coal trade was the backbone of her foreign commerce and the suprem-

With Japan's changing ideas toward China and facing the situation in China itself that I have described, with its banking, economic and transportation systems in a backward state, the consortium comes, with its new policy—not of imposing some large plan of exploitation and control upon China nor of securing great concessions from her, but of wishing to render China assistance in the development of her great basic, public enterprises. The consortium plans to do this with the approval and cooperation of the Chinese government and people, with safety of investment for the people of the United States of America, Great Britain, France and Japan, to whom Chinese securities will be offered; with an excellent interest return to such investors; with a fair profit to the bankers, and with the hope on the part of the consortium that within a few years it will have been able to assist China to reach such a point in the development and management of her enterprises that, as a consortium, it will be able to withdraw and leave the entire field to Chinese handling, and to such private foreign enterprise as may continue to be attracted by the opportunities in China.

acy of her merchant marine. Coal supplied the "return" cargoes for British steamers departing from home waters. England produced 321,000,000 tons in 1913, but today cannot get her weekly production even up to a rate that would mean 260,000,000 tons a year. Whereas seven years ago England exported coal at a rate of 6,000,000 tons a month, it has difficulty now in promising foreign countries 1,750,000. As for prices, domestic coal delivered in London costs about \$14 a ton and export coal fetches from \$24 to \$29 a ton. A British dealer recently figured that British coal of a particular sort delivered at a Swedish port would cost around \$40.

Upon England and Germany much of Europe used to depend for their coal. Neither country can now do its part, and Holland, Norway, Denmark, Sweden and the rest—even Russia—are searching the earth for coal. Coal from South Africa and coal from Australia are now being sold in northern Europe, and at lower prices than British coal.

Comparatively speaking, we are well off in coal supplies. While England has a current production that is 18 per cent below its output in 1913, we are pretty sure to show at the end of the year a production for 1920 that is 15 per cent over production in 1913. On August 7 of this year the Geological Survey was able to say that since January 1, 1920, our output of coal had been only 18,000,000 tons—i. e., 5 per cent—below the output in the corresponding part of 1917, the year about which the survey has said that its record of production had never before been so much as approached.

To be sure, we have our own difficulties about coal, and there are cases of real hardship, but on the whole we are mighty well off. Even in price we have, relatively speaking, cause for thankfulness, for the British manufacturer pays something like \$7.75 for coal at the mine and in spite of the short haul adds around \$2 for freight charges. With lots of people in the middle west getting coal on contract for \$4 at the mine, there is certainly a difference.

Is Saving a Sin?

One who has worked hard and saved a little money volunteers as spokesman for others like him by pointing out that there is something to be said for property rights after all

By A PROFESSIONAL MAN

I AM GOING to write an unsigned article—unsigned, because it is to be an indelicately personal article.

Sometimes I have been afraid that the anonymous stories I read of the experiences of regenerated sots, bankrupts of ninety who made good and so on and so forth, are glib and interesting fakes. They all sound alike to me.

Even in my disguise, voice changed and black goggles over my eyes, I hate to place myself in a position where I may be looked upon as being a cheat.

But I have something to say that ought

MAN, now, at this moment, but for property individually owned, would be, as once he was, a tusked, naked, hair-covered and cannibalistic savage, with a hole in the ground for a den.

to be said and I haven't the courage to stand up and out and say it like a man. Nor the egotism, I venture to hope.

I observed that I considered myself worthy of being depicted in part by my own pen. I think so because I went "over the top" with the millions of American women and men who never saw France.

It was a fine and mighty army that remained at home, paid the bills and had their pocketbooks shot into fragments, more or less. (I don't intend to say a word about dear meat and bread, nor soaring shoes and almost impossible clothes.)

I marched in that army from the day the first liberty bonds were sold to the day when the victory bonds were offered to the public by Uncle Sam. I disposed of sound securities for eighty cents that had cost me par and lent the proceeds to the Stars and Stripes to help fight the Hun.

Relatively, I was a heavier buyer of United States bonds, I imagine, than was John D. Rockefeller or J. P. Morgan. A large share of my small capital, saved during a lifetime of industry and the disciplining of many

IF THE demagogues, both breeds, could put all taxes, state and national, on the millionaires, they would do so by a unanimous vote. And after the millionaires had been sheared to the skin, the whole burden would be loaded onto Rockefeller.

desires, was spent to arm and transport the American army that gave the finishing blows to the German hosts.

No member of those magnificent battalions ever expects to get a pension or a bonus, although many of the soldiers are crippled with rheumatism or are suffering from rickety arteries and other alarming maladies incurred in the line of service—otherwise, during the years when they were laying by the funds which were borrowed, at a low rate of interest and much under their value, in 1917, 1918 and 1919 by their country.

Furthermore, my worthiness is jointly to be found in the fact that I belong to that very exclusive group of Americans who, having nothing in the line of products or manual labor to sell, was not eligible to be admitted to the ranks of the profiteers. Accordingly, I count myself to be both a veteran and an aristocrat.

My right, then, to discuss a few matters can not be disputed by any one who has not my own self-acknowledged and superior advantages. Before going further, I shall state my initial hypothesis. It is: God pity the person who has accumulated a little property, because it is the instinct of the rest of mankind to get it away from him.

A boy of six, beaming with the feeling of possession, steps through his gate to the sidewalk with a penny or a ginger cake. Simultaneously appear, but invisible till then, all of the other boys in the neighborhood.

The wheedling and the bullying there begun ends only at the tomb, a year, a decade, a generation, or a half century thereafter.

I take life as I find it and utter no reproach. But I mildly grumble when my government also lies in wait for me outside the gate. Government, as here employed, is a collective noun, embracing councils of towns and

MY FATHER once brought me twelve large glass marbles, in the centers of which were tigers and moss-roses, zebras and pansies. Forth I went, to the miserable sidewalk, and a lawyer's son by a formula of separation that I have forgotten, acquired all of those marbles.

cities, legislatures of states and Congress, the members of which are always searching for money to spend. "Always searching" is the phrase here to be emphasized.

I have been studying the gentry I have mentioned for many years and have gone through them, as William McKinley used to say, with a lantern in my hand. When they have a million, they demand two. Given a billion, they scheme and cudgel their heads for more.

Demagogues in politics and journalism—the one school plotting for votes and the other for subscribers and advertising—believe that public money is mostly or altogether obtained from persons of substance.

I make this statement: If the demagogues, both breeds, could put all taxes, state and national, on the millionaires, they would do so by a unanimous vote. And after the millionaires had been sheared to the skin, the whole burden would be loaded onto Rockefeller.

You may say that my language is intemperate. I answer that I am stating in all fairness the actual principle that now controls American taxation. The principle has not as yet been carried through in all its finish and detail, but it is on the way to that final moment when only the wealthy will pay and the rest of us, turned economic

waiters and porters, will be taking tips in the form of free government.

Until that occurs, I repeat, God pity the person who has accumulated a little property; he is the country dog timidly come to town under the wagon of his master and to whose

WHEN a single old bull shark is brought ashore in the net, ten thousand decent, little fish, like myself, will also be cast upon the sand and left gasping in the sun.

quivering body a tin can has been tied by some loafer.

Recurring still again to my own case, let men observe that I purpose to retire at the age of eighty or so. By that time, I suppose, the zest for work will have departed from my bones. Thence onward I mean to live wholly on my income, if any of my principal remains, and long before that time, I feel sure, incomes, for purpose of taxation, will be further penalized by statute.

Indeed, I can now sense by the feel of the air that "unearned" incomes are to be dealt with as though the persons having them should be made to suffer for the sin of not spending all that they got as they went along. (The only time, I wish to remark at this opportunity, that the authorities ever treat a saving man as a valuable asset is during a war, when the authorities desire to sell him low-interest bonds at par.)

A railroad president who receives a salary of \$75,000 a year "earns" it, by the philosophy of political economists and officeholders. In the lingo of business, the railroad president is a "going concern." He is up and doing and is contributing to the good of humanity. This theory, I admit, is sound.

But a dentist, eyes dulled by years of close toil legs and back unsteady from

ONE LEARNS to save while accumulating the first thousand. In all other respects one thousand, in the early stages of the journey toward a competency, is as difficult to obtain as another, provided it represents the accretions of economy practiced by a man working for wages or a salary.

much standing and bending over and nerves shattered by yowling patients, male and female, having laid away \$75,000 for his old age, is a shut-down establishment, in that he can no longer labor, and is to be taxed under a special rule and to the limit because the money on which he lives is derived from shares and mortgages and, therefore, is not "earned."

I understand perfectly the doctrine of those who propose a discriminative treatment of incomes. The idle rich, so-called, are the social delinquents who are to be dragged before the bar of justice. And at their heels, also in custody, are to follow all who are wealthy. I believe, however, it can be shown that, in reality, no incomes are ever unearned,

technically, and that all modern definitions on the subject are wrong.

But I shall not pause to argue the point. What I wish to say is that, when a single old bull shark is brought ashore in the net, ten thousand decent, little fish, like the dentist, will also be cast upon the sand and left gasping in the sun.

Here, again, I become personal, because I am a type. There are millions of men of my kind in the United States. Although unauthorized, I mean to speak for them—and for the widows of those who have died.

Naturally, I am not a money-maker. Nor a hoarder. I well remember my earliest lesson in what might be called the art of having a proper regard for one's own welfare. It was administered by my very practical mother, whose grandfather had been a woolen-draper, first in Saxony and then in Maryland.

Back from the east, where he went to purchase goods, my father, among other great joys, brought me twelve large glass marbles, in the centers of which were tigers and moss-roses, zebras and pansies. Forth I went, to the same miserable sidewalk, and a lawyer's son, now a director in a national bank, by a formula of separation that I have forgotten, acquired all of those marbles. I was five years old.

He Still Has the Ten

I MENTION this incident only because it is proof of a propensity. No spender will ever know or care what a struggle I have had to keep my expenditures less in amount than my earnings—but I always have. I still possess my first bank-book. May 2, I read—the year is no consequence—I was credited with \$10.

So began my humble little fortune. That \$10 is still mine, and it has been working for me, rain or shine, during the generation or more that has ensued since I saved it, a penny at a time, almost, and put it out at interest. Don't tell me that its increase was unearned by myself and that I sat in a rocking chair with nothing to do but greedily watch it grow. I'll fight any man who says so.

By and by I had a thousand dollars. We—my wife and I and our children—had plenty to eat and we wore good clothing. Piece by piece new furniture came into our home. These details I mention because, even though I am unknown, I do not want anyone to think that I was mean and skimmed my family. My mother, I said, took me in hand. My wife was her successor. But I shall also remark that my father was of Scotch-Irish blood.

The threadbare consolation that the first thousand dollars is the hardest to get is only true in one particular, but it is an important particular. No thousand, of the few I have, was ever a picnic for me. Each has been saved; none has been made. If I buy anything to hold, it falls in price, if not in value.

Backed by the government with loans sufficient in amount, I could "bust" any trust in America, simply by purchasing its shares on the open market. Potentially, I am more destructive than the Sherman law. Four per cent interest, compounded, has been my steady and dependable refuge and has

else to do, they purchase real estate that nobody ever wants.

With me it was: "Who will be elected mayor?" or, "Will the Governor be renominated?" or, "What do you think of free silver?" Only one man ever gave me a chance and he was a professional lecturer who, I thought, didn't know what he was talking about.

"D. F.," he said, which really are not my initials, "go out and buy a farm in the eastern suburbs."

He followed his own counsel and became wealthy and was considerate enough never to mention in my presence the suggestion I had scorned—it was not necessary, because it was ever after written on his kindly face and bald head and I could see it a mile off.

At one juncture I did believe that I saw an opportunity to make, by a short cut through green but pleasantly adventurous fields, what is commonly known as a little easy but honest money. A group of driving, cheerful and successful men took energetic measures to develop a new industry.

I was given, at my own request, one-half of one per cent of the underwriting. A very harmless and guileless little figure in a large and slashing coterie I was, but I paid my assessments on the dot and saw my stock rise rapidly in the local quotations. It went to \$40 a share.

"Keep it," advised the big insiders, the ten- and twenty-percenters. "It'll go to par," they said, gleefully, I thought, in my ear.

The Crash

IT LATER appeared that they were, at that time, skillfully ministering to a hungry market with their own holdings. Clerks, school teachers, widows, aged doctors and preachers and other small folk were buying odd lots and keeping the demand slightly ahead of the visible supply.

At the peak of the furor, the underwriters secretly met at headquarters. I sat at a long table with the others. Those of us who were ignorant of the fact were informed that the enterprise was settling in the mud and that two millions of

new money were needed to get it into deep and navigable waters.

The stampede of all the underwriters, with a single exception, toward the broker's office that afternoon broke the market. Shares sagged to \$25 the next morning. Then to \$20, then to \$10, then to \$5 and then to nothing. Eventually the public and one lone underwriter owned all of the stock of the company. The underwriter was myself.

You see, I was on record. In the village where I was brought up a man who could hear sold to a man who could not hear a horse that had the heaves in its loudest manifestations. The populace, except the merchants, who were neutral, divided. I, a boy, gave my moral influence and my voice



Visionaries

By BERTON BRALEY

THE POET builds visions made out of the air
And castles that fly upon wings,
But whether humanity finds they are fair
Or scoffs them as frivolous things,
And whether men look at the marvels unfurled
As mad or as practical schemes,
There's never a doubt in the mind of the world
That the bard is sincere in his dreams.

But when there's a dreamer in business, who builds
His visions in tangible form,
Who uses real gold for the domes that he gilds,
Whose castles will stand against storm,
Whose service is worked into iron and stone;
The faith of the world becomes dim
And the watchers cry out in a cynical tone,
"Say, what is there in it for him?"

Yet the dreamer whose fancies are wrought into deeds
Has fashioned vast magic on earth,
And conquered the wastes for humanity's needs
Brought comfort and beauty from dearth;
Have faith, unbelievers, both dreamers are true,
Both poets at heart are the same,
Both driven by joy in the work that they do
And touched by a similar flame.

given me what modicum of strength I now enjoy.

The legendary magic of the second and succeeding thousands lies in the "important particular," heretofore mentioned, that one learns to save while accumulating the first thousand. In all other respects one thousand, in the early stages of the journey toward a competency, is as difficult to obtain as another, provided it represents the accretions of economy practiced by a man working for wages or a salary.

Physicians, for most part, spend their lives with sick children, temperamental women and moaning and frightened men. They are supposed to dwell in that nobler realm where money and its investment is never discussed. When they have a little, not knowing what

to the deaf man. He had been swindled, I maintained, rather boldly.

So, there I was, committed beyond any right or chance of accompanying them when the underwriters, after taking their hats and pushing back their chairs, set forth, each to find his favorite selling commissioner. It didn't require much thinking for me to reach the conviction that I was unfitted for business as sometimes carried on.

There was nothing left, then, but to save systematically. As my studies developed and my experiences became coherent and matured I perceived an old truth, namely (and I shall call it my concluding hypothesis), that man, now, at this moment, but for property individually owned, would be, as once he was, a tusked, naked, hair-covered and cannibalistic savage, with a hole in the ground for a den.

Thus, as related, man lived in the earth, and much of the earth, for ages, fighting with clubs and stones gigantic, four-footed, flesh-eating monsters. It was only in his second stage that man, a wanderer on the face of creation, with flocks and herds, obtained the idea, that of personal property, which made the world as it is today.

Presently man settled on his own pastures and was a land-owner, planting and harvesting for himself and his domesticated animals. He learned to sew and weave, to cut stone, to make pottery, to work in iron.

He built ships. He went out in wagons. Centuries afterward he constructed railways. I value man as highly as anybody and think of myself before I think of my few dollars'

worth of property, but the divine (mark the solemnity of the adjective) aspiration to gain property and to hold it is the beginning of beauty and utility.

You may say that I have left the road and am aimlessly strolling in a tangle of brush and

In fact, he is civilization itself.

His money, whether he is a mechanic or a merchant, rears cities and adorns and fructifies continents. With Socrates the saving man can say: "I have learned to wish for so little that, though I have scarce anything, I have had always enough."

And the program of the Greek philosopher, who owned but one coat at a time and went barefoot in the streets of Athens, has been, in spirit, the early policy of all sensible and saving men since his day, some twenty-four centuries in the past.

I know that the enormous debt of this nation must be paid and right now I am doing my share, I believe, in meeting interest bills and government expenses; but I am weary of being pestered by demagogues, of their insatiable desire to squander other people's money in order to aggrandize themselves.

Until elected to the United States Senate I shall refrain from suggesting, publicly, a fairly just and workable plan of taxation. And if I were elected and were to suggest my plan, I would be defeated were I to run for the second term.

I'll go so far as to say, however, that I would make every one pay (italicize "every one") in proportion to his income and his expenditures. The dead-head list would be abolished, but I would be indulgent toward the

poor, provided they were industrious and economical.

Also I would make a set speech at least once a year in praise and defense of the persecuted savers, men and women, of the republic.

A Comment on the Story

By GEORGE E. ROBERTS

Vice-President of the National City Bank, New York

THIS is a very natural and wholesome outburst from a man who is instinctively right on fundamental things. He puts the emphasis where it belongs. The world is carried forward by the people who consume less than they create. You might think to hear the agitators and up-lifters that all the progress of the past had been won by talk and controversy, but it has been the use of capital in the form of machinery that has made possible the shortening of the work day and at the same time increased the supply of comforts for every home.

The public has an interest in capital accumulations. What would it be worth right now if all the railroads could be immediately electrified and the trains hitched up to the running streams? It will be done when there is capital available to do it. Somebody must pay the wage workers the hundreds of millions that will be due them for the construction work, and wait for reimbursement over many years.

And yet the whole trend of popular opinion is against the accumulation of capital and in behalf of the spenders who make no contribution to this progress, but who consume from day to day the full value of all the work they do. The disposition is to trim capital on every side, upon the theory, of course, that nobody is harmed but the capitalist, who has more than enough anyway. And so mills shut down and workmen lose their wages

because railroad facilities have fallen behind the needs of the country and capital is not to be had for their improvement. Every step of social advancement waits on capital. Millions of capital must come constantly from somewhere to keep the industries up to the wants of a growing population, but instead of acclaiming and honoring and rewarding contributors to the capital fund, we harass, abuse and dishonor them and greedily seize and dissipate their accumulations.

There is extreme solicitude that every spender shall have his pocket-book replenished to make good every loss in the purchasing power of his income, resulting from diminished production for which he may be in part responsible. But who says anything about the diminished purchasing power of income from savings slowly and painfully won in the past—savings that, as part of investment fund, have contributed to community progress?

Nobody thinks of these past accumulations, or the rights of savers, when they discuss the permanency of the present wage and price level. The savers, the builders, excite no sympathy or interest. They are not trouble makers! They always have taken care of themselves and carried society along, and done it so as a matter of course and of instinctive fidelity to right principles that most people do not know how it has been done.

trees that leads nowhere. Yet there is a compass on my desk and by it I am proceeding straight to my destination, which is that the accumulative man has done and is doing all things meritorious and desirable.

He is the world's elect.

A Stand on Labor Principles

The heaviest vote ever cast for its referenda is polled by the Chamber of Commerce of the United States in adopting the twelve planks of its labor platform

BY THE LARGEST VOTE ever cast for any of its referenda, the Chamber of Commerce of the United States has adopted the platform of labor principles contained in Referenda Numbers 31 and 32. The planks with the vote on each are given below.

The vote on the twelve planks of Referendum Number 31 was almost unanimous, the greatest opposition, 54 votes, being recorded upon the ninth clause, which holds the right of either party to an industrial dispute to object to representatives "chosen or controlled by any outside group or interest."

The plank which stirred the most interest was the second which said: "The right of open-shop operation is an essential part of the individual right of contract possessed by each of

the parties." For this only 4 votes were recorded in opposition.

Not the least interesting development of the vote is the attitude of some organizations which asked to have stated their reasons for not voting. The Merchants' Association of New York referred to a report of its own Committee on Industrial Relations. The report recognizes the "spirit of fairness and justice" which had animated the committee of the National Chamber, but pointed out the difficulty in phrasing statements of industrial relations in such a way as to avoid ambiguity.

The Cleveland Chamber of Commerce asked to be recorded as not voting, and presented its own "declaration of principles" on labor relations, issued earlier in the year

before the issue of the referendum. Comparing the two sets of principles, the Cleveland Chamber tests the position. "In general, the emphasis in the referendum is laid on the respective rights of employers and employees, whereas, in the Cleveland 'declaration,' the emphasis is laid rather on the mutual concessions and agreements necessary in the employment relation in order that the public interest may be best served."

Here follow the text of Referenda Numbers 31 and 32, with the vote thereon:

1 Every person possesses the right to engage in any lawful business or occupation and to enter, individually or collectively, into any lawful contract of employment, either as

employer or employee. These rights are subject to limitation only through a valid exercise of public authority.

IN FAVOR, 1675. OPPOSED, 2.

2 The right of open-shop operation, that is, the right of employer and employee to enter into and determine the conditions of employment relations with each other, is an essential part of the individual right of contract possessed by each of the parties.

IN FAVOR, 1665. OPPOSED, 4.

3 All men possess the equal right to associate voluntarily for the accomplishment of lawful purposes by lawful means. The association of men, whether of employers, employees or others, for collective action or dealing, confers no authority over, and must not deny any right of, those who do not desire to act or deal with them.

IN FAVOR, 1677. OPPOSED, 4.

4 The public welfare, the protection of the individual, and sound employment relations require that associations or combinations of employers or employees, or both, must equally be subject to the authority of the state and legally responsible to others for their conduct and that of their agents.

IN FAVOR, 1671. OPPOSED, 4.

5 To develop, with due regard for the health, safety and well-being of the individual, the required output of industry is the common social obligation of all engaged therein. The restriction of productive effort or of output by either employer or employee for the purpose of creating an artificial scarcity of the product or of labor is an injury to society.

IN FAVOR, 1675. OPPOSED, 3.

6 The wage of labor must come out of the product of industry and must be earned and measured by its contribution thereto. In order that the worker, in his own and the general interest, may develop his full productive capacity, and may thereby earn at least a wage sufficient to sustain him upon a proper standard of living, it is the duty of management to cooperate with him to secure continuous employment suited to his abilities, to furnish incentive and opportunity for improvement, to provide proper safeguards for his health and safety and to encourage him in all practicable and reasonable ways to increase the value of his productive effort.

IN FAVOR, 1679. OPPOSED, 2.

7 The number of hours in the work-day or week in which the maximum output, consistent with the health and well-being of the individual, can be maintained in a given industry should be ascertained by careful study and never should be exceeded except in

case of emergency, and one day of rest in seven, or its equivalent, should be provided. The reduction in working hours below such economic limit, in order to secure greater leisure for the individual, should be made only with full understanding and acceptance of the fact that it involves a commensurate loss in the earning power of the workers, a limitation and a shortage of the output of the industry and an increase in the cost of the product, with all the necessary effect of these things upon the interests of the community and the nation.

IN FAVOR, 1677. OPPOSED, 3.

8 Adequate means, satisfactory both to the employer and his employees, and voluntarily agreed to by them, should be provided for the discussion and adjustment of employment relations and the just and prompt settlement of all disputes that arise in the course of industrial operation.

IN FAVOR, 1668. OPPOSED, 8.

9 When, in the establishment or adjustment of employment relations, the employer and his employees do not deal individually, but by mutual consent such dealing is conducted by either party through representatives, it is proper for the other party to ask that these representatives shall not be chosen or controlled by, or in such dealing in any degree represent, any outside group or interest in the questions at issue.

IN FAVOR, 1568. OPPOSED, 54.

10 The greatest measure of reward and well-being for both employer and employee and the full social value of their service must be sought in the successful conduct and full development of the particular industrial establishment in which they are associated. Intelligent and practical cooperation based upon a mutual recognition of this community of interest constitutes the true basis of sound industrial relations.

IN FAVOR, 1664. OPPOSED, 2.

11 The state is sovereign and cannot tolerate a divided allegiance on the part of its servants. While the right of government employees, national, state or municipal, to be heard and to secure consideration and just treatment must be amply safeguarded, the community welfare demands that no combination to prevent or impair the operation of government, or of any government function shall be permitted.

IN FAVOR, 1663. OPPOSED, 4.

12 In public-service activities, the public interest and well-being must be the paramount and controlling consideration. The power of regulation and protection exer-

cised by the state over the corporation should properly extend to the employees in so far as may be necessary to assure the adequate, continuous and unimpaired operation of public-utility service.

IN FAVOR, 1649. OPPOSED, 18.

THE REFERENDUM on public utilities employment carried the recommendations of the Chamber's committee on public utilities. These were two in number, and are given as follows, with the vote on each:

"The committee recommends that strikes by employees of all public service corporations performing public service essential to the lives, health, security, comfort and well-being of the people should by law be explicitly prohibited. For, 1,564; against, 97.

"The committee recommends that suitable tribunals should be created by law to adjudicate differences between the employees of public service corporations and their employers and that the decisions of such tribunals should be final and binding upon both parties. For, 1,571; against, 100.

Members of the Chamber's committee on public utilities are as follows: Lewis E. Pierson, chairman of Irving National Bank, New York; Henry G. Bradlee, president, Stone & Webster, Boston; Arthur W. Brady, president, Union Traction Co., Anderson, Ind.; F. B. DeBeard, director of research, New York Merchants' Association; Albert W. Harris, president, Harris Trust & Savings Bank, Chicago, Ill.; Charles L. Harrison, director, Cincinnati Chamber of Commerce; John W. Lieb, vice-president, New York Edison Co., New York; H. L. McCune, lawyer, of Kansas City; Paul N. Myers, president, St. Paul Association of Public & Business Affairs; John W. Van Allen, lawyer, of Buffalo, N. Y.

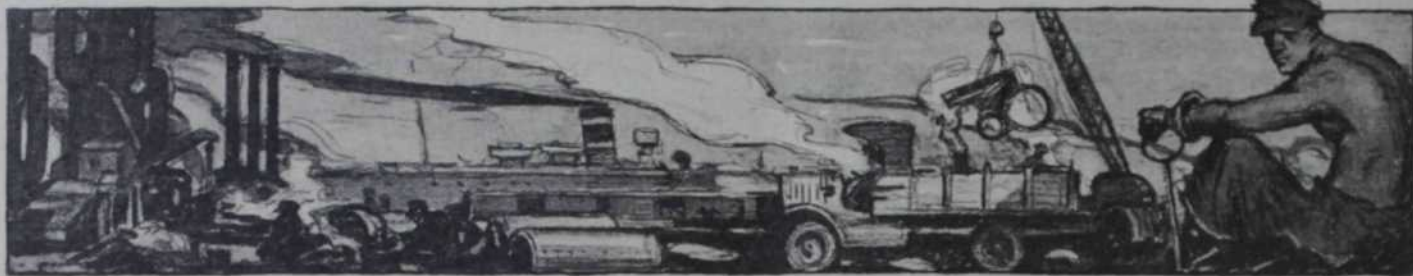
Britain's Business Empire

EMPIRE partnership is an idea underlying the steel combine formed in Canada. The partnership lies in association of ownership of Canadian resources in coal and ore with British experience in steel-making and British capital.

Eight Canadian companies have entered the amalgamation, which is described as having assets of \$486,000,000. Liquid assets are said to exceed liabilities by 22 per cent of the stock that is being issued. In addition to British directors of high standing, there is an advisory committee in London.

This empire industrial partnership is expected by the promoters to point the way for others, each developing natural resources to their fullest extent on a basis that will permit competition in world markets.





"Something Should Be Done—!"

HANDS OFF BUSINESS!" the cry goes up from every market place and convention hall. And yet—those who join the shout with the loudest voice may the same day visit their congressmen to try to get over "remedial legislation" that would really mean more government interference. A prominent member of the senate said recently that the average man would be amazed to know of some of the asinine proposals that had been seriously suggested for more laws to cure "the situation."

Condemning the Government is a popular pastime. It is so universal that a thoughtful contemporary has suggested the following setting-up exercises for those who indulge in it:

Rise at 7 a. m. Stand in the middle of the room. Raise arms slowly over head; take deep breath and say, "Damn the government," lowering arms in attitude of despair ten times. Extend body flat on the floor. Cover eyes with hands; kick heels; think of the railroads and weep till dry. Kneel, wring hands, meditate upon the labor unions and groan a hundred fifty times.

Assume sitting position, hands on hips. Sway gently to and fro. Concentrate on Mr. Burleson until a general frothing at the mouth sets in, until exhausted. Collapse on floor; grovel vigorously; think of the income tax and gnash teeth in anger.

Observe this simple regime every morning before breakfast and you will reach the office with most of the cares and troubles of the day already out of your system.

One of the most encouraging things about sin is that it carries its own cures. When little Johnny eats an apple that is too green, he suffers the tortures of stomachache for a time and then nature applies a corrective; when the world goes on a rampage of killing, it suffers for awhile until natural laws supply a remedy.

We are still in the stomachache stage. The cure is inevitable. No one can estimate how much it will be hastened by plaintive cries of "Congress ought—," or "Something must be done."

Business Building by Centuries

MAKERS of fine footwear since the days of George III"; "Unrivaled for 150 years"; "This corporation has granted insurances for 200 years"; "Known for upwards of a century"; "Founded 1815."

These are random phrases from the advertisements in the trade supplement of *The London Times*.

We lay less stress on age in American business. A recent inquiry as to how many American business houses could look back on a century of service yielded an incomplete list of but fifty-eight.

Yet age is an asset. It is a promise of fair dealing, a history of honesty.

On what rock shall a business house be built that shall live not one century but four?

There is a business house in London which deals in tin and which has been in existence for more than four hundred years. It is controlled today by the descendants of the family that founded it.

During the war tin was extremely hard to get. The price was jumping every day. A custom of the trade was that the buyer paid the highest price quoted at any stage of the transaction. There is the date of the order, the date of the reception and entry of the order, the date of the invoice. If the price on the first date was the highest the buyer expected to pay it. If the price was highest on the date of shipment the tin was billed accordingly.

In September, 1917, an American founder was hard put to it for tin supplies. Finally he sent an order to the New York representative of the British house of four hundred years,

standing. However, he mailed and received a form notification that it had been received and would be attended to. The price on the day of the order was 54 cents a pound.

The price went up. Seven months later it touched \$1.34. And just about this time the American buyer received his shipment of tin. It was invoiced at 54 cents. Here is what the American found: The British company had been handling tin for more than four hundred years. In invoicing the tin at the sacrificial price the sellers were simply following house policy. This policy had been found satisfactory for a dozen generations.

The American was so impressed he has set out to found a house policy of his own after the same principle. His firm is becoming a missionary in its territory. It is building for a long future.

Pick Your Own Proverb

NOTHING is completely bad. Do higher freight rates worry every line of business? Not a bit. The moving picture industry smiles broadly and says in effect: Higher rates, fewer traveling shows, more people to go to the neighborhood theater.

The rush of cancellations which forced manufacturers and jobbers in shoes to unload cheers the makers of spats, who say: "Hundreds of men will wear low shoes this winter and the demand for spats will be good."

And we might quote a proverb or two about ill winds and silver linings and one man's meat.

Canada's Greatest Farmer

WHEN CANADA wanted to honor Seager Wheeler, her greatest farmer, she had, unlike China, no Order of the Golden Crop to give him. He had to be content with a humdrum LL. D. from Queens College, Kingston, Ont. That was the recognition of a man who has pushed back the northern wheat limit 200 miles and added millions to the farming wealth of Canada. And all this on a farm of 160 acres which he bought for \$3 an acre from the Canadian Pacific Railroad in 1883 and to which he has never added.

If genius is an infinite capacity for taking pains, Dr. Wheeler is a genius. Year after year he selected seed wheat until he had produced the two varieties, Red Bobs and Kitchener, with which his name is linked. Year after year he picked the choicest heads to be replanted and picked over again. His Red Bobs was the result of one red head in a plot of white wheat from Australia. From it he has harvested 60 bushels to an acre. Kitchener was bred by the same painstaking selection, bred partly for length and strength of straw to stand the climate of western Canada. With this wheat Dr. Wheeler made a world's record yield of 82 bushels to the acre. Think of that as against an average in the United States of 16 or 17 bushels. He once refused \$15 for a six ounce bottle of this wheat, a little matter of \$2,400 a bushel.

A patient plodder, middle aged, far from rich—he says himself that he has not yet had time or money to better his farm buildings—Seager Wheeler is one of Canada's great philanthropists. He has given his homeland wealth that will last, he has put into practice the gospel of production, and production of the cornerstone of all, the bread of our breakfast tables.

Capitalizing the Town Pump

IT'S WISE in these brutal days of indictments and blue-sky laws to have some sort of property back of the oil stocks which are to make Rockefellers of us all. Down in



Kentucky they've capitalized the town pump. The project is described in a serious-minded organ of the oil trade as "one of the best jokes of the year." Local talent, we read, secured a thirty-day option with renewal privilege of one year on a 30-foot town pump which was recently found to be floating pure gasoline on the water. The well apparently is getting seepage from a nearby garage.

Another abandoned well nearby is reported also to have contained oil. Indications are that someone has planted both wells to sell stock.

Indications also are that most of the good advice against selling Liberty Bonds to buy bogus stocks has been wasted.

A New Problem in Monopolies

EXCLUSIVE CONTRACTS may come before the courts and have their validity tested under the Clayton Act. The case arises upon a decision of the Federal Trade Commission. The Clayton Act makes it unlawful to lease goods, machinery, supplies or other commodities with an agreement that the lessee is not to use or to deal with a competitor of the lessor; the law contains a proviso that the unlawfulness is to exist when the agreement tends substantially to lessen competition or to create a monopoly in any line of commerce. This provision of law the Interstate Commerce Commission is to enforce when it is applicable to common carriers and the trade commission when other business concerns, except banks, are involved.

The exclusive contract which is in question is between a company owning refrigerator cars with railroads in the south-eastern part of the country. The car company contracts to supply all the refrigerator cars the roads need and the roads contract to use these refrigerator cars exclusively.

In May the trade commission held the contract was forbidden by the Clayton Act. In July the car company took an appeal to the courts. It is within the range of possibility that when the case is decided it will turn upon the question whether the trade commission or the Interstate Commerce Commission should deal with such questions, rather than upon interpretation of the Clayton Act.

Blacklist to Stop Cancellations

CANCELLATIONS have recently worked hardships in different countries. In England, where industries are freer than in the United States to take concerted action, some trades took united action. For example, the members of the lace trade agreed that they would not submit to cancellation of orders. Under their plan, anyone who cancelled an order for lace had his name notified to the whole industry and he could not in the future buy from any member until he had complied with his original contract.

The Right to Hold Up Prices

PRICE GUARANTEES, or rather, guarantees against declines in prices, will be an important subject before the Federal Trade Commission this autumn.

Last December the commission issued a questionnaire asking a discussion of the questions involved. At the beginning of August the commission published a pamphlet in which it summarized the replies it had received. Manufacturers and dealers in more than thirty different brands of merchandise have recorded their points of view, pro and con.

On October 5 the commission will ask representatives of the different industries and dealers to meet at Washington, discuss the merits of the question, and express to the com-

mission their collective point of view whether guarantees against decline in price are fair or unfair.

Turpentine to the Rescue

IF YOU CAN'T grow it, make it, is the motto of the chemical industry. The allotment to this country by the Japanese camphor monopoly is too small and the price is too high. Refined camphor brings \$2 a pound as against 50c. a few years ago. Three large chemical companies have begun the manufacture of synthetic camphor from turpentine. Camphor mixed with gun cotton is an important ingredient of celluloid. Thus a home product may parry a threatened blow to the American woman's toilet table and the moving picture industry.

Has Australia Its Burleson?

ANOMALIES of the postal service" are being scheduled in Australia. Every business man in Sydney is invited to send in the "anomalies" he has found in his own experience with despatching and receiving mail, and they are being properly set down in something like a doomsday book. Life in the Antipodes, it seems, conduces to restraint in expression. In our part of the world postal "anomalies" are likely to be visited by harsher words.

Stock Dividends That Are Taxable

STOCK DIVIDENDS continue to give rise to questions before the Bureau of Internal Revenue. On August 5 the bureau stated some of its points of view regarding the effects of the Supreme Court's decision on March 8.

In order that a stockholder may not, under the Supreme Court's decision, be liable for tax on a stock dividend, his corporation must be authorized by the law of its state to issue such dividends and they must represent a transfer of surplus to capital account. If the corporation has not such authority, under the laws of a state, but increases its stock and issues a cash dividend under an agreement by which stockholders undertake to use the dividend to buy stock, the stockholders are taxable for the dividend. There is the same result if the corporation has authority and issues a cash dividend with an option in stockholders to invest in new stock. If a corporation pays a dividend in stock of another corporation which it has held in its assets, the stockholders are taxable for the market value of what the stock may receive.

There may be more complex cases. The bureau states its point of view regarding one. If a corporation, having accumulated a surplus before March 1, 1913, transfers to capital account a portion of its surplus, issues new stock representing the amount transferred and then declares a dividend payable partly in cash and partly in new stock, the portion of the cash dividend corresponding to the part of the surplus accumulated since March 1, 1913, is taxable, but none of the stock dividend will be subject to tax as income.

"Catastrophe of Green Peas"

PARIS speculators in vegetables were caught by the abundance of June. One of the biggest dealers sent a telegram to his source of supply in the country, saying "Stop sending anything, for heaven's sake; catastrophe of green peas."

Perhaps the gentleman thought the heavens had opened and the raindrops had become fresh peas. Telegraph officials had another explanation and sent a copy of the message to the police. Thereupon the dealer went to jail, while the final words of his telegram became famous.

Getting the Jump on Strikes

Even union members have sought the aid of the Kansas industrial court; how the experiment is working out as shown by typical cases that it has dealt with

By CLYDE M. REED

Member of the Kansas Court of Industrial Relations

WHAT is the Kansas Court of Industrial Relations doing?

This question is asked by the editor of *THE NATION'S BUSINESS* and like questions are coming to members of the court and to Governor Allen from all over the United States.

The Court of Industrial Relations could have been called a court of human relations without departing from a reasonable description of the functions which it performs. It is an effort to find a solution for the quarrels that arise out of industrial relations which threaten the public welfare, and on one side these relations are entirely human.

The last case filed in the court has a number of most unusual features. This relates to the switchmen's strike in the railway yards of the M. K. & T. at Parsons, Kansas.

The Parsons yard is the heart of the "Katy" system. At this point six divisions converge, including the line from St. Louis, the line from Kansas City, the line from Oklahoma and the main line from Texas.

Throughout a series of terminal strikes that paralyzed traffic the country over, the Parsons yard operated almost continuously. While the trouble was at its height the Parsons switchmen were out a couple of hours, but an assistant attorney general of the State of Kansas was sent down to discuss the matter from the viewpoint of the industrial law of the state and operation was resumed.

Trouble at Parsons

BUT when conditions were getting back to normal, trouble started at Parsons. Two assistant yard masters who had gone from Parsons to the Kansas City terminal to assist in keeping the latter open during the strike, returned to Parsons to take their usual jobs. Despite the fact that the Parsons switchmen had worked through the strike, they resented the return of these men who had helped to break a strike in another yard; so they went out.

Again, an assistant attorney general (in fact the same one) was sent to Parsons. He discussed the matter with the striking switchmen. He caused the arrest of two of their leaders, for, while the Kansas law does not interfere with the right of individuals or group of individuals to quit work, it does deny the right of any man to direct that other men shall quit work who are engaged in an essential industry, the cessation of activity in which would interfere with the public welfare. Transportation of food, fuel and clothing is, under the law, essential industry.

The Brotherhood of Railway Trainmen joined with the railroad officials to break the Parsons strike. They were successful. The Parsons yard resumed operations and all of the old men returned to work save about 20, whom the railway company declined to reemploy under any conditions.

Now comes the interesting angle.

Eighteen of the men who were not reem-

IN WHAT WAY can the poor public, the "innocent bystander" of so many industrial rows, protect itself? Can the state step in to stop a strike?

Kansas—famous throughout her history for the courage and directness with which she has tackled her problems—has sought an answer to these questions in its Court of Industrial Relations. The new institution has been attacked by leaders of union labor headed by President Gompers, of the A. F. L.; it is defended by Governor Henry J. Allen and other Kansas officials. This is not an exposition of the theories of the case—it is a narrative of how the idea is actually working out written from the inside by one of the judges.—THE EDITOR.

ployed, including the two leaders who were arrested, have appealed to the Court of Industrial Relations under the Kansas law for an investigation of the working conditions and of the action of the railroad in denying them reemployment. Notwithstanding the attacks that have been made on the Kansas Industrial Law by leaders of organized labor, the men who were denied reemployment immediately appealed to the Kansas law for an adjudication of their difficulties. A significant fact is that their petition was prepared by Kansas City attorneys representing the newly organized Yard Men's Association of America, the organization which is being formed by the railroad switchmen independent of the existing labor organizations. In their complaint to the industrial court they joined the M. K. & T., its officials and the local officials of Parsons of the Brotherhood of Railway Trainmen.

The case, which has not yet been heard, will be a most interesting phase of the industrial struggle.

Then there is the case of the "shot-firers" in the Kansas coal district. A shot-firer is a man who goes into the coal mines at the time the miners and other employees leave at the end of their day's work, to fire the explosive charges which have been placed by the miners throughout the day. Their hours of labor are not long, but their occupation is extra hazardous. The testimony before the industrial court in its recent inquiry into mining conditions in the Kansas district disclosed the fact that many shot-firers complete their day's work in less than one hour, and few, if any, of them take more than two hours. But the testimony also disclosed that shot-firers are probably the poorest insurance risk it would be possible to locate. One mine in the Kansas district has the tragic record of the death by accident of seventeen shot-firers in seven years. This was the story told under oath and presented in the form of a complaint to the industrial court asking for an adjudication.

Originally, shot-firers were paid \$2.80 per

day on a basis of firing the shots in forty "rooms" or "places," a room or place being the section of the mine assigned to some individual miner. This made an average of 7 cents per room, each room containing two or three shots.

Shot-firers were to be paid pro rata up to the time any one of them fired the shots in 25 rooms or places, above the basis of 40, after which a second shot-firer was to be employed. Additional shot-firers were to be employed when the number of rooms reached 25 above the units of 40.

The shot-firers now receive \$6.70 per day as a basic wage, but they allege that they are not given pro rata pay for the shots fired above those in 40 rooms. This is their grievance. They allege that during the war, to save man power, the number of shot-firers was decreased. Of course, as the average employment of a shot-firer is only about one hour per day, it is apparent that one man could do the work of several. Now the shot-firers want a pro rata pay for the shots they actually fire, based upon the standard of 40 rooms.

The Shot-Firers' Views

THE main point of their contention is that for several years they have tried to get their own organization, the United Mine Workers of America, of which they are all members, to handle their case. The spokesman for the shot-firers was very emphatic in his denunciation of the failure of the district officials of the U. M. W. of A. to get justice for his craft. He is a Scotchman and his eyes snapped when his attention was called to the constitutional amendment proposed by President Howat of this district, and approved by the mine workers' annual convention at Kansas City in April, to the effect that any miner appealing to the industrial court would be fined \$50 by his organization. "I'm not afraid of that," said Alexander McAllister. "I'm an American citizen and a citizen of Kansas and I have the right to bring my case to court."

And bring it they did.

In this case the mere filing of the case was sufficient. The operators and the miners' organization got together and adjusted the shot-firers' grievances without waiting for the Industrial court to give its decision.

Then there was the discovery made by the court that the coal operators advancing money to miners between the bi-weekly pay days deducted 10 per cent of the amount advanced. When a miner in the course of testimony as to conditions made this statement the aspect of the court changed from one of the more or less calm and judicial atmosphere of a trial court to one of instant attention. One of the three judges took the witness out of the hands of the attorneys.

"State that again," he requested the witness.

The witness repeated his statement that, for the advances in salaries which he obtained between pay days, a deduction of 10 per cent was made. It was a most incredible statement. The court could not believe its ears.

"Is the court to understand," the judge asked, "that, if you asked the company to advance you \$20 of the sum you had earned and which would be due you on the following pay day, a deduction of two dollars would be made?"

"That is correct," the witness replied.

The court held a hurried conference and immediately a verbal order was issued to the effect that the practice of coal companies charging 10 per cent commission on advances made between pay days should be discontinued. Not more than one and one-half per cent was allowed to be charged, with a minimum of 25 cents in any case.

An Age-Long Feud

THE industrial problems of the mining fields are innumerable. There is an age-long feud between the miners and the operators. The history of the coal mining industry is bad. There has been oppression and persecution of the miners by the employing force. Segregated into camps remote from other communities, with limited or no school and church facilities, the miners have fought their way out of payments in scrip of the companies; of being required to use this scrip at "pluck-me" company stores; of being cheated on weights and sold inferior explosives at high prices, until the whole background of the mining industry is one of antagonisms between the employer and employee.

On the other hand, the operators complain of outrageous, unfair and unsafe leadership among the men, that has caused untold strife and tremendous financial losses.

Slowly, but surely, the Kansas Industrial Law and the Kansas Court of Industrial Relations is winning its way into the confidence of employer and employee, because finally there comes to an adjudication of the quarrel an impartial tribunal that seeks only justice and holds no brief for either side.

The longest case in point of time required for a hearing that has been laid before the court was that of the International Brotherhood of Stationary Firemen and Oilers, a term which is not very descriptive. The men affected are railroad roundhouse and shop laborers, who receive from 38 to 50 cents per hour. They filed their case in the Kansas court before the national law, creating a Railroad Labor Board, was passed. They had failed to secure redress in the ordinary way. There was no other tribunal to which they could appeal. At a meeting, shortly before the case was filed, at St. Louis, the National Executive Committee of this organization, by a vote of nine to two, authorized the Kansas members to submit their claim for a living wage to the Kansas Industrial Court.

Instantly the railroad attorneys filed a demurrer to the petition setting out a lack of jurisdiction of the Kansas court, alleging these men were engaged in interstate commerce. Their demurrers were overruled and the case proceeded to trial. Five days were required. At the close of the trial the attorneys for the railroads again denied the jurisdiction of the Kansas law over these men. On the other hand the men themselves reiterated their desire that the case, so far as this state is concerned, should be adjudicated by the Kansas court,

and declared that in this position they had the support of the national officers of their organization.

Kansas members of the Maintenance of Way and Shop Laborers organization broke away from their national organization to bring their case in the Kansas Court. It will be recalled that the national body ordered a strike of the Maintenance of Way Employees last February, which, however, was rescinded before it became effective. At that time a considerable proportion of the members in Kansas had prepared to refuse to comply with this strike order, setting out that they did not want to come into conflict with the law of the state in which they were citizens and that they were willing to submit their grievances to the Kansas Industrial Court, which has been done.

Recently unorganized employees of a flour mill in one of the principal Kansas milling towns filed a case asking for increased wages.

Before the time for making the answer had expired the milling company asked for a continuance to give them time to adjust the trouble with its employees. This was, of course, granted. The court desires that in every case these difficulties be adjusted between employer and employees where that is possible.

The court has rendered a number of decisions affecting the wages of street car employees and electrical linemen; affecting working conditions in the mining fields, such as have been described; affecting prices to be charged by coal operators for explosives, and decisions covering other industrial conditions.

The largest electrical railroad in Kansas is known as the Joplin and Pittsburg line. It connects the cities of southeastern Kansas with those of southwest Missouri and covers the coal district. This railroad has been the scene of more strikes than any other in this whole section, some lasting as long as 80 days, the losses to the company and the men running into the hundreds of thousands of dollars. All of their labor troubles are now being adjusted without cessation of operation.

It would be perhaps too much to say that both sides are entirely satisfied with the decisions of the court but it is a fact that both sides have accepted the decisions and have indicated their intention to continue to do so, and both sides are glad that their disputes can be adjusted without open warfare with all of its loss in wages and injury to business that has marked previous conflicts.

More than that the public has approved. In the primary elections of August 3, Kansas voted overwhelmingly to support the Kansas Industrial Court despite the opposition of the more radical labor unions.

The Ports and Their Problems

DURING the month of July, Mr. N. Sumner Myrick, vice-chairman and counsel of the Ocean Transportation Committee of the National Chamber of Commerce, made a tour of the ports of the Pacific coast for the purpose of meeting shipping men, learning their

problems and their views upon national policies, and making an examination of port facilities. The reception which Mr. Myrick met with in all of the cities visited not only reflected the fine hospitality so characteristic of the Pacific coast, but also the appreciation of business men for the interest displayed by the National Chamber in the promotion of the shipping interests of that section of the country. Mr. Myrick had the good fortune to meet in public meetings, conferences and personal interviews several thousand men of the cities visited.

The enterprise shown by the people in developing their facilities for commerce, and the extent to which port development has been carried, was one of the most vivid impressions that the visit developed. From San Diego in the south to Seattle in the north, the dominant note was invariably ambition and successful accomplishment. There can be but little doubt that the Pacific coast has entered upon a new career as a center of national export and import trade. To promote this the municipalities have spent, and are spending, millions of dollars in the construction of piers, warehouses and docks and in the improvement of harbors. If these efforts and expenditures are properly supported by the government and administrative boards, there is not the slightest doubt that the Pacific coast will become even a much larger contributor to the economic welfare of the country than it now is.

More Factories for the Coast

ANOTHER consideration of the highest importance in this connection is the tremendous potential power in the unused water, in the northern districts particularly. When once this tremendous power has been properly applied there would seem to be no reason why every wheel that turns on the coast should not be turned by electricity. That eastern manufacturers appreciate the importance of the facts stated is evidenced, not only by the inquiry and attention which these manufacturers are giving to the Pacific coast, but more importantly in the steps already taken for the erection of large manufacturing plants. In one of the southern cities one of the largest manufacturing concerns in the country is about to erect a mammoth establishment, and other concerns engaged in the same industry are expected to follow suit. Always the well-known climatic advantages will weigh heavily in favor of the Pacific coast.

During the visit it was unexpectedly disclosed that a great majority of the shipowners and shipping men of the Pacific coast are strongly opposed to the preferential railroad rate provisions in the new Merchant Marine Act, particularly as those provisions are related to the Pacific coast. The basis of the opposition lies in the fear that foreign lines now operating out of the Pacific ports, deprived of the advantages which accrue solely to American bottoms, will transfer their sailings to Canada, and also to the Gulf and Atlantic ports, where the preferential rates do not apply, at least to the extent that they do on the Pacific coast.

The supporters of the provisions aver that the opposition rises from misapprehension, and that when the provisions are fully understood the fears that now prevail will be dispelled. However that may be, there is no denying the fact that at the moment the large majority of those interested in the subject strongly fear the consequences of the discrimination which the act provides.



What! \$45 for a \$25 Dress?

Surely, if the merchants' costs warrant it; some of the complications that would follow a law requiring goods to be stamped with the manufacturer's selling price

By L. D. H. WELD

Formerly Professor of Business Administration, Yale University

WE ARE ASSUMING that a certain state has passed a law that the manufacturer's selling price should be stamped on merchandise sold within the state. Enter a woman who asks for a blue taffeta dress. She wants one similar to a dress her friend bought the day before.

CUSTOMER: "Yes, that's the kind I want. How much is it?"

SALESWOMAN: "Forty-five dollars."

CUSTOMER: "Let me see it, please. Why, the cost price marked here is only \$25.00. That's an outrageous price."

SALESWOMAN: "Well, you see, madam, our selling costs have gone up so that we have to charge a wider margin than we used to. It costs us over 30 per cent. to do business, and the margin on this dress is only about 44 per cent. Besides, there are so many odd sizes and soiled dresses that we shall have to sell at a sacrifice at the end of the season, that we shall do well if we make a living profit."

CUSTOMER: "Well, I don't know what you mean by 44 per cent, but if you buy at \$25.00 and sell at \$45.00 that looks like almost 100 per cent to me."

SALESWOMAN: "Let me explain, madam; when I say that our cost of doing business is over 30 per cent, that means 30 per cent of our sales. So, to make a comparison, we have to figure our gross profit on these dresses as a percentage of selling price, and in this case it figures out about 44 per cent."

CUSTOMER: "Well, I don't know how you expect me to understand all that kind of stuff. It seems to me that you are having an awful time to explain away your profiteering. I believe I'll report this store to the Fair Price Commissioner. He'll prosecute you under the 'Levi Law.'"

SALESWOMAN: "Well, I'm sorry, but it is a little difficult to explain."

CUSTOMER (excitedly): "Oh, and I remember now that my friend's dress was marked with a cost price of \$30.00! And here you are trying to charge me the same price for a dress that is marked only \$25.00! I'm mighty glad to have this new law, so that we can find out what rascals you are. This isn't the same kind of dress at all; you're trying to palm off an inferior article on me."

SALESWOMAN: "I beg your pardon, madam, but let me explain. We bought a stock of these dresses some time ago for \$25.00 apiece. Recently, we began to run short of certain sizes, and had to order some more. The price had gone up to \$30.00. We couldn't charge different prices for the same dress, so we've marked them all at \$45.00 and that gives us no more than a fair profit."

CUSTOMER: "Well, that doesn't sound reasonable to me; I guess I'll go somewhere else, where they don't try any of this funny business on me."

(Exit customer.)

SALESWOMAN (to herself): "Darn that crazy law. We can't do an honest business without getting in wrong with our customers. I explain, and explain, and explain, and it does no good. Guess I'll get a job where I don't have to fight and explain all the time. These women never will understand this business."

They've Tried to Pass It

THE FOREGOING dialogue merely illustrates what might happen if we had a law requiring manufacturers' selling prices to be stamped on all articles of merchandise. The



The costs of doing business vary. Dresses and jewelry can never be sold at the same margins. A grocer's average is about 18 per cent of the sales; a jeweler's is around 30.

President of the United States recommends such a law, and attempts have been made in various states to pass one. Montana passed one, but it was declared unconstitutional. There is a bill in Congress calling for the stamping of manufacturers' prices on shoes.

The difficulties in the way of such a law lie in the fact that certain fundamental principles of merchandising are not understood.

In the first place, most people have very little idea of the expenses necessary in conducting a retail store. A western congressman recently complained on the floor of the House that the retail profit of 33 1/3 per cent on shoes was outrageous. He seemed to think that this 33 1/3 per cent was net profit, rather than a gross margin out of which expenses have to be paid. This is the thought in the minds of a great many people who do not realize that it costs a considerable proportion of the retail price to pay the store expenses. A margin of 33 1/3 per cent is extremely small if it costs 30 per cent to do business.

This cost of doing business varies very greatly for different stores. Suppose, for example, that our shopper had bought the \$45.00 dress, which had a cost price of \$25.00, and that then she went into a grocery store and bought an article for 25 cents on which the cost price was 20 cents. She would, undoubtedly, say to herself: "Now, that looks like a fair margin. This grocer is an honest man, but that department store is a robber."

The truth is that the cost of doing business for different kinds of stores varies substantially. For a grocery store, expenses average only about 18 per cent of sales; for jewelry stores, around 30 per cent.

Not only this, but the cost of doing business varies greatly in stores of the same kind.

The cost of operating shoe stores, for example, varies all the way from 15 per cent to 30 per cent, and this variation in costs results from a variety of factors, such as the amount of service given, the quantity and variety of stock carried, the location of the stores, etc.

Whether a store makes deliveries and gives credit, of course, makes a difference in the cost of doing business, not so much as most people think, however. The cost of performing this service in an average grocery store is less than 5 per cent of the sales.

Two different shoe stores may sell the same pair of shoes at different prices and yet make practically the same profit. Some shoe stores are in expensive locations, carry a wide variety of stocks, and have high-grade salesmen who spend an adequate amount of time with each customer so as to be sure of fitting the shoes properly. Another store may carry a smaller variety of stock and have salesmen whose one duty is to sell as many pairs of shoes in an hour or in a day as possible. The second store could probably afford to sell a pair of shoes for at least a dollar or two less than the first store.

And yet, imagine what would happen when the average consumer finds identical goods, with the same cost marks, sold at different prices in different stores! Some people would understand, but others wouldn't. It might be a good way to educate people to the fact that they can buy goods cheaper if they are content with less service and if they want to run the risk of not being so well fitted. But it is going to be a painful process.

Would Take Lots of Explaining

NOT only that, but the cost of doing business varies for different articles in the same stores! The salesman may exhibit a dollar article on which the cost price is 80 cents, and another article on which the cost price is only 60 cents. It will certainly be difficult for a customer to understand why the dealer is content with a 20-cent gross margin on the one and insists on a 40-cent margin on the other. And yet the two articles may yield the storekeeper only the same net profit.

This is because it requires more salesmanship to sell some articles than it does to sell others and because the rapidity of turn-over may be greater in one case than in the other. That is, one may be a well-known trademarked article that sells quickly and rapidly, and on which the amount of capital tied up turns fairly rapidly. The other article may be an imported delicacy, which requires more or less salesmanship, and only a few of which are sold. The same thing applies to different shoes in the same retail stores. A standard black or tan shoe can be sold at a smaller

STRAIGHT LINE METHODS

The BUDGET

The Most Important Factor in the Control of Your Business

As the financial rudder to the Ship of State—so is The Budget of the executive in the direction and control of the finances of his business.

The present political campaign is directing general attention to The Budget as the only safeguard against extravagant and wasteful expenditures in government and the excessive burdensome taxes which are the natural result.

In your own business The Budget is of no less importance. And at no time in the history of American commercial life has a careful preparation and constant use of the Business Budget been so necessary as the present.

Cost in material, in labor, and in production, change over night. Prices drop, profits decline and loss seems inevitable. Even the fixed laws of supply and demand need intelligent application.

The only dependable safeguard against over expansion, over production, and over expenditure is your Budget. It alone presents at all times the facts of your business, based on figures. It is the cause and effect of your financial policy. It is the ways and means by which your income and expenditure are conducted and balanced.

The successful executive in business today *plans his work and works his plan*. The Budget is his guide.

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offer the service of tried and experienced staffs of business engineers and expert accountants. Their Straight-Line Methods of System, Organization and Business Control, find most perfect application in the Budgets of many of America's largest and most successful enterprises.

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HOUSTON

STRAIGHT LINE METHODS

margin than can shoes with fancy tops or of various colors.

But this is not all. There would be practical difficulties in the way of enforcing a law requiring the stamping of manufacturers' cost prices on merchandise. What is meant by cost price? Are manufacturers' selling expenses to be included as part of the cost? Suppose one manufacturer markets through jobbers and, therefore, has a relatively small selling expense; suppose another manufacturer assumes the functions and consequent expense of the jobbers and sells direct to retailers. If selling expense is to be included, the manufacturer selling direct to retailers would have to mark his shoes at a higher price than the

manufacturer selling to jobbers—and yet the shoes might be of identical quality. If only the primary costs of raw material and labor and overhead factory expense are to be included, such a cost price would be so far out of line with final retail price that nobody could possibly understand why the spread is so wide.

Furthermore, suppose that this difficulty were overcome. Different manufacturers follow different policies in dealing with their customers. Some are more lenient than others in accepting returned or damaged goods or as to discounts and terms of payment. It might easily be possible for manufacturers, especially if they are the least bit unscrupulous, to practically vitiate the meaning of the manu-

facturers' cost price marks through the methods that they use in dealing with these matters.

Undoubtedly, a law requiring manufacturers' costs to be stamped on merchandise would correct some abuses and make it impossible for dishonest retailers to misrepresent goods and to palm off goods of inferior quality at higher than reasonable prices; on the other hand, such a law would undoubtedly result in injustice to the great mass of retail merchants who are doing an honest business and who would have to spend a good part of their time explaining merchandising practices to their customers. These are matters that should be thoroughly understood before we decide we are ready to experiment with such a law.

A Treaty of Trade Peace

The purpose of the new International Chamber of Commerce as seen by a government trade expert; a move to make business freer and to bring together business men of all nations

By F. R. ELDRIDGE, JR.

Chief, Far Eastern Division, Bureau of Foreign and Domestic Commerce

THE organizing of an International Chamber of Commerce in Paris on July 7, 1920, was the first step in the formation of a "League of Business." Representing the sober thought of practical business men, this world chamber is at once the logical outcome and the necessary adjunct of a political alliance among nations.

Moreover, it indicates a healthy attitude toward the predominant economic and commercial questions which underlie political situations. The findings of this body of world business leaders are as concrete as they are helpful in clearing an atmosphere charged with apprehension and uncertainty, and active steps are to be taken to put them into effect.

Import and export trade is to be made easier, and world commerce, still shackled with fetters fastened upon it by war restrictions, is to be allowed the fullest possible freedom for growth and expansion. This summarizes the task and its magnitude is not underestimated by those who have undertaken it. Waste and fraud in international dealings must be eliminated, and resolutions were offered looking toward the elimination of waste in government expenditures. It was further recommended that "intimate collaboration between governments and their respective business organizations be actively encouraged in order that public confidence may be revived and that labor and capital alike may be inspired to make the greatest effort to restore prosperity and plenty throughout the world."

The mischievous use of trade names in each locality will be investigated by a committee whose report will include all methods of unfair competition, and a recommendation of special legislation for their prevention.

Documents, practices and laws affecting international commercial intercourse are to be standardized. A bureau for the exchange of foreign credits is one of the concrete proposals for bringing this about, and another contemplates the standardization of the nomenclature in the customs tariffs of all countries. A technical commission to unify customs regulations is recommended, while import and export restrictions will be revoked as soon as the conditions in each country permit.

A central bureau of international statistics is to be established for the purpose of collecting, centralizing, analyzing and interpreting statistical information. This will necessitate uniform classification of statistics by all

nations and a common method of determining values. These plans are specifics which the new "League of Business" would prescribe for a commercially sick world.

The international business body does not propose, however, to leave the patient convalescing without administering a series of tonics, and most important among these is an effort to increase the total production of the world, making the product available to the people of the world. As one way of accomplishing this it has been determined to hasten the more general use of hydro-electric power. Another measure looks to the most scientific and economic use of mineral fuel, while the coal resources of the world, it is proposed, should be developed to their utmost. In view of the world's shortage of petroleum, prospecting for new sources, it is thought, should be made from special concessions to prevent exploitation. A statistical bureau for forecasting output and probable needs, as well as keeping returns up to date in every country, is necessary and must be established.

Money talks, and by increasing the mutual profit in international transactions, it is expected to speak a very definite word in the promotion of international friendship. Indeed, a resolution was passed urging special consideration to the proposal of distributing excess profits more equitably between nations. How this can be done is a problem to be worked out, but the spirit which realizes that the germ of war and national hatred is bred in international usury, will not be daunted in carrying out its purpose.

Personal friendship between business men and bankers of different nations is recognized as one thing that will minimize misunderstanding and remove prejudice. In order to encourage such friendship, it is suggested that the present inequalities of treatment granted to foreign banks in different countries be eradicated by uniform banking laws, and an avoidance of duplicate taxation of wealth in more than one country is equally desirable.

A practical application of such friendly relations between large banking and commercial interests would be in reducing importation of nonessentials by countries whose exchanges are depreciated and in increasing their exports. In this way a return to more normal exchange rates would be hastened, and, what is more important, an excellent check on violent fluctuations in exchange could be

maintained. Countries whose exchanges are depreciated would be restricted from issuing foreign loans and should be encouraged to seek funds from their own nationals.

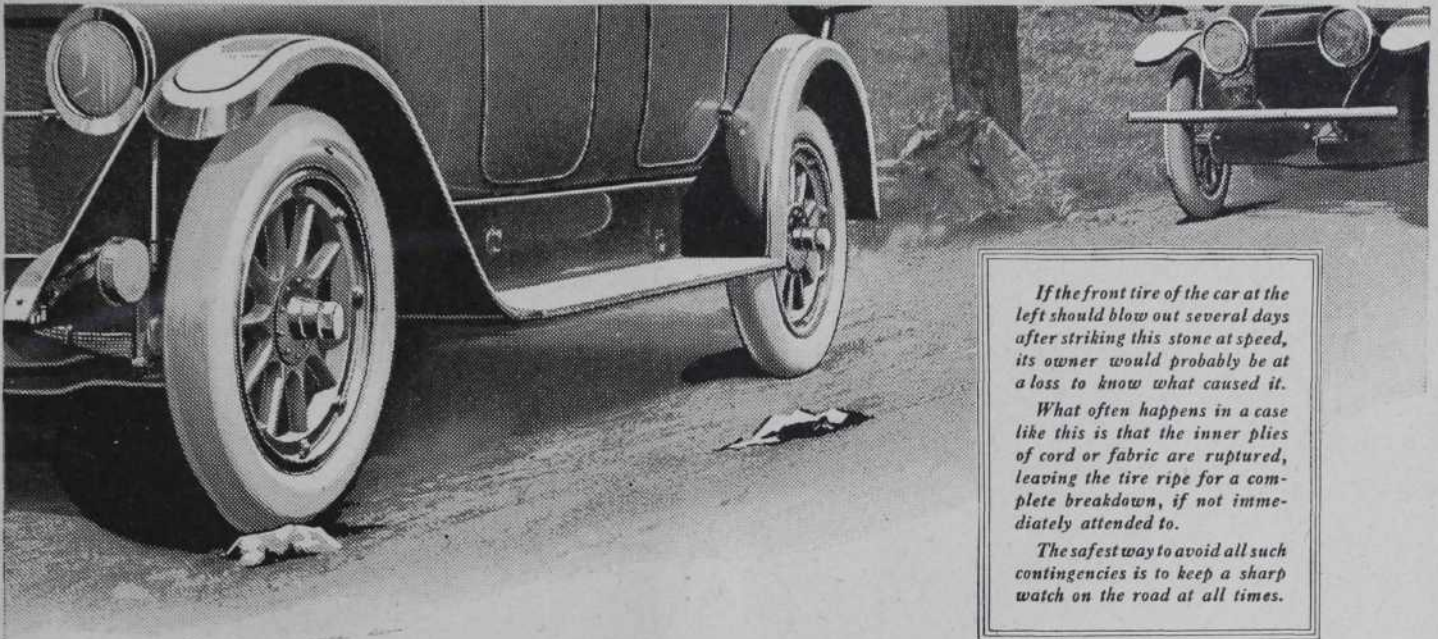
The cooperation of labor is called upon to prevent delay in the turn-around of vessels at the ports of the world. Labor is also invited to minimize delay between ships and trains as well as delay in transportation by rail. These are only the most salient features which reveal the importance of labor in any scheme to rejuvenate the world through international business cooperation. Labor's place in a "League of Business" is most distinct and important, for the plans, if successful, mean better conditions for all who work.

This first meeting of the International Chamber has been naturally much concerned with organization details. The temporary headquarters at 33 rue Jean Donjon, Paris, are in charge of Dr. Edward Dolleaux, the temporary secretary-general and professor of Political Economy at the University of Dijon. At the first meeting 500 delegates from France, Italy, Belgium, Great Britain and the United States met to build the machine which will set in operation the most comprehensive program to promote trade relations ever attempted.

The permanent organization, which will probably be located at the seat of the League of Nations in Geneva, Switzerland, will centralize data on economic and social conditions, in order to ascertain the facts regarding production and requirements for the past, present and future in every country. When assembled this information will be placed at the disposal of members and official agencies in the form of reports. Public opinion will also be informed of business and economic conditions from the facts collected by this super-chamber of commerce.

Never before in the history of nations has such recognition been given the business interdependence of the world. The very seriousness of the many pressing and acute problems in the field of international commerce, finance and economics has in itself suggested the solution, for a strong International Chamber of Commerce can occupy a unique position of influence in international affairs. Elimination of petty difficulties and friction is the principal rôle of the new organization, and this is to be done by the application of business to diplomacy rather than diplomacy to business.

Are Car Owners too Easily Satisfied with their Tires



If the front tire of the car at the left should blow out several days after striking this stone at speed, its owner would probably be at a loss to know what caused it.

What often happens in a case like this is that the inner plies of cord or fabric are ruptured, leaving the tire ripe for a complete breakdown, if not immediately attended to.

The safest way to avoid all such contingencies is to keep a sharp watch on the road at all times.

IN every community of any size there are two types of tire dealers—one who encourages his customers in their search for the best and one who tries to persuade them to be satisfied with what they have.

The first man is selling a service; the second, tires.

* * *

There are still too many motorists who meekly accept the blame for a tire that has worn out before its time.

They will listen while the dealer tells them of all the varying conditions that a tire has to undergo.

They will agree when he pic-

tures them as lucky that they got what they did out of a tire.

Not one motorist in five has yet found out what a tire is really capable of—how much he really has a right to expect from his tires.

* * *

The great mass of motorists in this country are just beginning to wake up to the fact that you can't encourage waste and have economy at the same time.

They are beginning to find out for themselves what makes for economy in tires.

And they are going to the dealer who not only sells good tires to the man who insists upon them,

but who refuses to have anything but good tires in his store.

* * *

From the beginning the whole weight of the United States Rubber Company—the largest rubber manufacturing concern in the world—has been thrown on the side of the *good* dealer.

Backing him first and last with all of its great and varied resources—greater and more far-reaching than those of any concern in the business.

And looking forward with confidence to the time when motorists *everywhere* will insist upon a higher standard of tire service.

United States Tires

United States Rubber Company



Fifty-three
Factories

The oldest and largest
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Two hundred and
thirty-five Branches

Huge Crops Buttress the Foundations of Our Prosperity and Mock Those Who Had Forecast Famine

By ARCHER WALL DOUGLAS

THERE is no longer any question as to an abounding harvest in all manner of agricultural products. The winter wheat crop will be about 535,000,000 bushels and the spring wheat not less than 275,000,000 bushels, despite severe local damage by black rust in some states in the northwest. With a few more timely rains there will be 3,000,000,000 bushels of corn, of which the southern states will furnish about one-third. Texas has the greatest corn crop in its history, while Kansas has the unusual accompaniment of large corn and wheat yields in the same season.

There will be a plentiful

We have only to consider the uncertainties which would have confronted us in the event of an actually poor harvest to realize the altered meaning of the present situation. The growing cotton crop has come back very decidedly, despite the presence of untold numbers of boll weevils in some sections, and the lateness of the season.

This come-back is due, as in the case of all other agricultural products this season, to favorable weather of late, and to incessant, industrious cultivation. These things make for large production per acre, which, rather than large acreage, is the basis of all great crop yields.

Business Conditions, August 11, 1920

THE MAP shows at a glance the general condition of the country. It is prepared by Mr. Douglas as a weather map of business. The light areas indicate promising crops, industrial activity, the creation of new needs in home, shop and farm—in a word, "high pressure" buying markets. In the black areas these conditions are lacking, for the time being. The shaded areas are "half way."



supply of other food products: grains, tubers, forage, fruits and vegetables for man and beast. Those prophets of famine and bread lines can have the satisfaction that no one now remembers who they were nor what they said. The wheat surplus in Kansas alone, taking into account that carried over from last season, is over 100,000,000 bushels, and requires 100,000 cars to move it, or about 4 per cent of the total of all freight cars in the country. Shipments from southern points of fruits and vegetables average about 15,000 cars weekly and are gradually bringing down the prices of these table necessities once regarded as merely delicacies and luxuries.

Although receipts of grains at primary points have not been heavy, largely owing to lack of cars, yet prices have been on the toboggan-slide because of the presence of a great surplus in this country, which, sooner or later, must find, not only a domestic but a foreign market.

The Russian bear, who walks as a man, is just now the serious problem of Europe. What he does and what he threatens may have a potent effect for the time being on the prices of grain. Other than this, the promise seems to be somewhat lower prices than those which have prevailed, but not so low as seriously to interfere with the prospect of much business in all agricultural sections during the coming fall. Once more, as many times in the past, the crops proved the surest and most enduring foundation of commercial prosperity.

The promise now is for a production of 12,500,000 bales, barring those 57 varieties of things which may happen in the next three months.

There is now on foot a widespread and comprehensive movement to treat the cotton crop from planting to picking and marketing in a strictly scientific business manner. This, as in all like movements in other agricultural products, simmers down in the last analysis to the elimination or modification of the final operation of marketing as a thing subject mainly to all manner of competition, from local to international.

As regards probable prices in either the near or far future, cotton has nothing on Providence in that its ways are past finding out. Cotton raising by irrigation in California and Arizona is growing in volume and importance. From 1912 to 1919 the acreage in Arizona increased from 400 to 37,000 acres and the yield from 240 to 40,000 bales. This year the acreage has still further expanded to 210,000 acres.

Indecision and hesitancy still characterize textiles and some leather products. Reduced working days and sometimes entire closing down of the mills marks textiles in some localities. It seems to be more a waiting and readjustment period in a moderate way than the prelude to any marked change. This

LIQUID TRANSPORTATION

Cotton Seed Oil

A business from a by-product

Cotton seeds were once burned as waste. But science now utilizes their oil in lard compounds, table oils and soaps. The industry thus created is only one of the many served by The General American Tank Car Corporation.

Industrial progress is never satisfied with old methods. So General American engineers experiment constantly, now with this type of car, now with that. Every General American made car, therefore, is the last word in durability, reliable operation, working efficiency. And the preponderance of "GATX" equipment in any railroad center is a visible evidence of superiority.

The Corporation builds, repairs and leases tank cars for every liquid commodity. A free Consultation Bureau is maintained to which shippers and rail men everywhere are invited to submit their particular problems for expert opinion. Just get in touch with the address below.

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WEBORG

waiting attitude commences with the consumer and extends to the manufacturer. Conditions in metal lines are much the same.

Lack of transportation is the principal hindrance to better and larger distribution. This operates to maintain and even advance prices because of the comparative scarcity thus caused. Railroad rate advances point the way to an ultimate solution, but, at the best, it seems a long story. Unless experience be misleading the new purchasing power of the railroads will be a strong factor in maintaining both prices and the volume of business.

Building operations are much hampered by almost everything that can happen to them: scarcity and the high price of labor and material, and difficulty of financing loans on construction projects. Few things, in the present situation, could do more than general building and construction to give stability to conditions, employment to labor, and cause a widespread demand for commodities in every branch of business. The needs of new housing and new construction are too obvious to need comment. But it is equally obvious that only the most imperatively necessary construction can and will proceed under the present costs, present difficulties and present uncertainties.

The automobile industry gives indications of approaching the peak of production for the present. This may release material for other steel and glass industries which greatly need these commodities. Any complete point of "saturation" in automobiles does not seem imminent—rather in a moderate way, a readjustment which has long been looked for. Not only will there be a demand for replacement but also for new purchasers, for we are fast realizing that automobiles are a necessary and inalienable factor in modern civilization. Any talk about their being luxuries and unessentials is rather unknowing and foolish. There was once the same talk about telephones and the telegraph.

The Truth About the Auto

OUTSIDE the definite part which automobiles play in business, and which steadily grows in importance, they have done more to broaden the understanding and the mental horizon of their users than any invention within a generation. In especial they have been a boon, beyond comparison, to the dweller on the countryside, on the farm and in the small farm. Of a once popular sport, that of bicycles, now relegated altogether to strictly useful purposes, it is interesting to learn that the annual output is much in excess of the days when they were a passing craze.

Among the things of cheer is the promise of good harvests in those sections of the northwest, practically all of Montana, western North Dakota, western South Dakota, and northern Wyoming, which have been sore distressed by crop failures for from two to three years past. With the completion of the harvest there will come a change in conditions and in the volume of business in nearly all these sections.

It is a great season for watermelons, with shipments close upon 30,000 cars before the season is ended. They come northward about 1,000 cars daily, not only from the southern states but even from far away California. Georgia leads with nearly 10,000 carloads, with South Carolina and Florida each approximating about 4,000 cars.

And thereby hangs a tale of progress of the southeastern portion of the great "show me" state of Missouri. Once upon a time, a generation ago, that part of the state was unknowingly classed as backward and un-

progressive. It was thought to be peopled largely by "swamp angels" whose diet consisted of corn bread and "sow belly" (bacon), and whose chief industry was the brewing of illicit whiskey.

Then came the days of the draining of swamps, of the consequent opening up of the richest of alluvial soils, of an increase in population greater than elsewhere in the state, of a proportionate growth in education, in intelligence, in every phase of economic and social development. This season southeast

Missouri, some eight counties in all, will ship 3,000 carloads of watermelons to northern markets. And every one of them is selected and of guaranteed quality. They will all be marketed through one central distributing concern. Coupled with this is a system of intelligent advertising, all based upon the merit of the melons which will be known far and wide as the "Honey Heart." Verily, it is a wise and true saying that the recollection of quality remains long after the price is forgotten.

Letting Up on Business Men

England shows more consideration than we do in the matter of income taxes although she always has her eye on the taxable pound

SOME of our export salesmen and executives and other employees in the foreign service of American companies feel that they have a just kick against the payment of American income taxes while they are living their lives abroad. Some of our American companies operating exclusively or principally abroad find it hard to figure out why they should be required to pay the United States Treasury the same taxes as companies located and doing business exclusively, or in the main, within the United States.

The British requirements under like conditions are, in many respects, far more liberal than our own. On the other hand, the British Government has an eye on the various sources of revenue, and is not overlooking all of the opportunities for income tax or profits arising to British residents and British companies abroad. The British Royal Commission on the income tax, in March of this year, made a report. Some of the points in that report are well worth the consideration of American business men and American legislators.

For example, in determining whether a British subject employed abroad must pay British income tax, the British Government distinguishes between those that are domiciled abroad, or not ordinarily resident in the United Kingdom, and British subjects who are employed abroad only temporarily. The former are exempt from payment of income tax on income earned abroad, except for remittances home. The latter, however, must pay their British income taxes. The Royal Commission makes the following pertinent remarks on this subject:

In regard to income from an employment exercised abroad by a British resident under a British employer, we recommend that if the employee's absence from this country does not extend over a continuous period of twelve months, or if his employment cannot be shown to be in the nature of a permanent employment abroad, he should be deemed to be exercising his employment in the United Kingdom, whether or not he technically maintains a residence in this country, and liability to tax should extend to the whole of his remuneration. If, on the other hand, the employee is abroad for a continuous period for more than twelve months, or if his employment can be shown from the first to be permanently abroad, only that portion of his remuneration which is remitted to this country should be liable to taxation here. The commission believes that when the employment is exercised abroad under a foreign employer, it would be a distinct hardship to tax a British subject on the whole of his remuneration earned abroad under a foreign employer, merely because he maintains a residence in this country for his wife. We, therefore, recommend that income from an employment exercised abroad under a foreign employer should be liable to tax only to the extent that remittances are made to this country.

Concerning remittances, the commission

adds the following: "We recommend that all remittances from a husband abroad to his wife in this country, whether they are made from earned or unearned income, should be chargeable."

The commission had been urged to recommend that foreign profits of British-controlled companies should be taxed at a lower rate than profits earned wholly within the United Kingdom, and that in order to encourage foreign investments in British companies, British-controlled companies should be taxed at a lower rate on profits distributed to non-resident foreign shareholders. Regarding this the commission states:

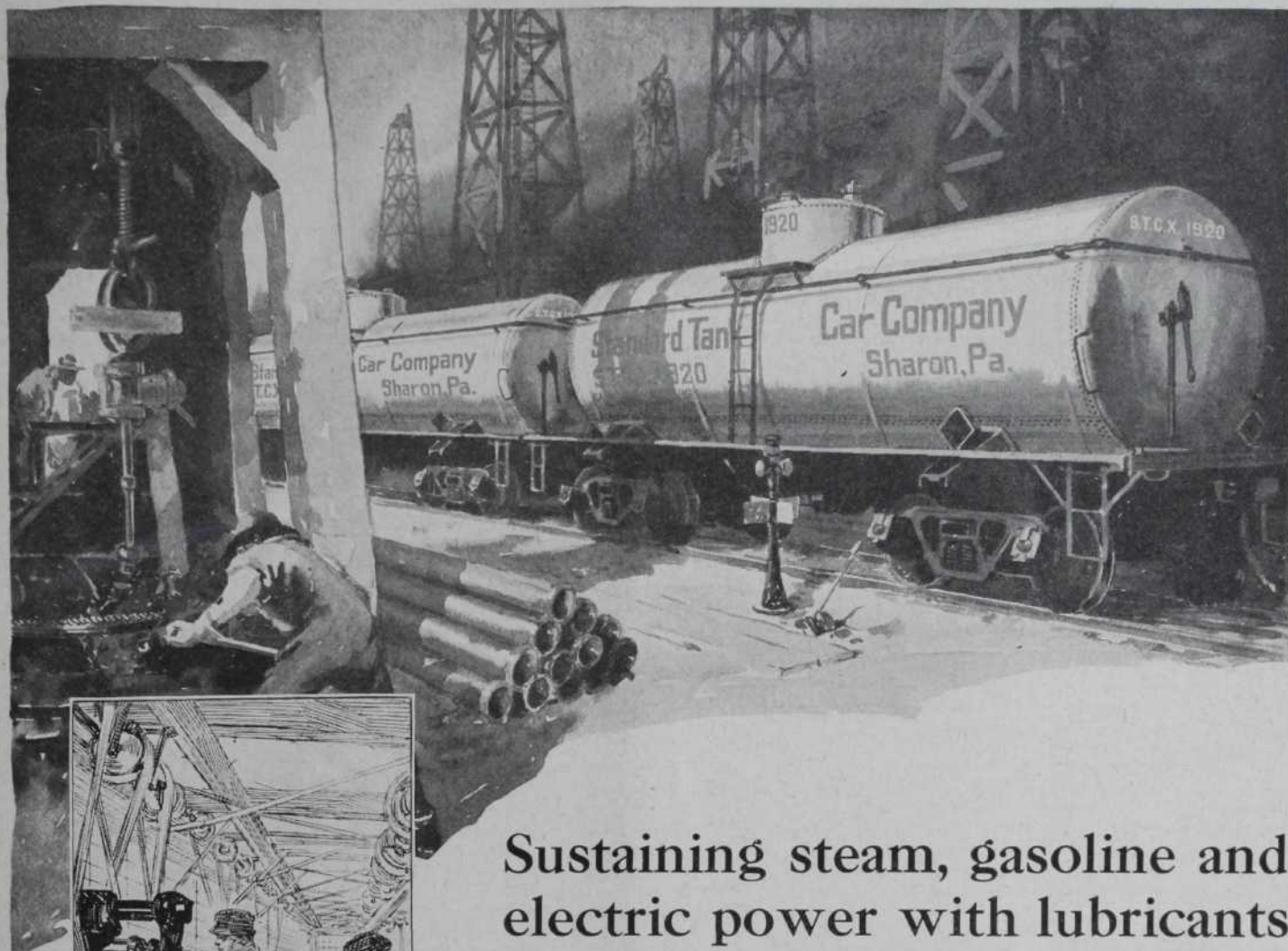
A careful consideration of the arguments has not enabled us to make any general recommendation, either (a) that the foreign profits of the British-controlled companies should be taxed at a lower rate than profits earned wholly within the United Kingdom, or (b) that British-controlled companies should be taxed at a lower rate on that portion of their profits (whether earned in England or abroad) which is distributed to non-resident foreign shareholders.

The commission felt that on these points they had really been asked in effect to recommend both a bonus on the import of foreign capital and a bonus on the export of British capital. It was felt that if these two suggestions were accepted it would tend to encourage a distribution of capital which would ultimately cause a loss of revenue.

With the exception of certain recommendations for specific relief in connection with double income tax, where the income taxes in the British dominions or in foreign countries, as well as the British taxes, are liable to fall on British companies, the commission was against easing up the taxation on British persons and companies on trading profits arising abroad. The recommendation is:

We recommend that there should be no change in the present law which renders British resident persons or companies liable to be assessed on the whole of their trading profits irrespective of what proportion of their profits arises abroad, and irrespective (in the case of companies) of the nationality or residence of their shareholders. . . . Further, we think, that even where the trading operations of British registered companies are carried on abroad by a foreign board of directors or by means of a subsidiary company abroad, the company (and its subsidiary) should still be deemed to be operating from within the United Kingdom, if the majority of the voting power of the company can be exercised in this country. In other words, our suggestion is that no distinction should be drawn between probable active control and complete potential control.

The commission then goes on to recommend that British laws definitely cover this contingency in order to prevent a very heavy loss of revenue.



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Without lubricants there would not have been any mail train with this magazine for you. Except for these destroyers of friction, bearings, gears and shafts could not move, and there would be no such thing as machinery; steam, gasoline and electricity would waste their power on inanimate metal.

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Teaching Plants Table Manners

Men from our government are searching the heart of little explored countries for useful plants and are guarding the health of native crops that produce food and clothing for us

By AARON HARDY ULM

A BIG car whizzes by, noiseless except for a gush of wind and the impact of heavily loaded rubber tires on the gravel of the street.

"Ah! The developers of the automobile had some vision!" exclaims a distributor of bromides.

Certainly. For example, there's William Woodrich. He was an early builder of automobile tires. Back in the days when tires of only the flivver variety were needed, he visioned the hastily approaching time when tubes and casings the size of sewer pipes would be demanded.

"And the sort of cotton I now use won't do for them," he muses. "To make big tires we'll have to have long staple cotton. How shall we get it? There's our domestic Sea Island cotton, but costly, and the hungry boll weevil is approaching the fields that produce it. There's Egypt—far away and uncertain."

So Woodrich goes to Washington and puts his vision before the government's agricultural experts.

"Certainly we will help you," say they. And they send to Egypt for cotton seed, which they plant experimentally on irrigated bottom lands in Arizona. They replant year after year until a cotton that will grow successfully in the southwest is evolved. Result: A secure domestic supply of long staple cotton for automobile tires and other uses.

It happened—but not that way. A truer version would credit the conceiving of the industry to poets, not your rhyming, phrase-manufacturing poets, but poets that weave harmonies out of sunlight, soil, seed and twigs.

One may be pictured gazing over the once bare lands of Salt River Valley, and with Thomas Carlyle exclaiming:

"Produce! Produce! Were it but the most infinitesimal of a product—produce it in God's name! 'Tis the utmost thou has in thee. Out with it then!"

From the Nile to Arizona

AND in a short time big areas of the desert were blanketed with blossoms from the Nile. Now, the Egyptian-American cotton growing industry being on a sound footing, the same poets are resolving other visions into practicalities. The object may be a new citrus fruit, the progeny of a marriage between the grapefruit and the mock orange. Or it may be a peach tree builded on the roots of wild trees dug from the hills of western China, and by grace thereof able to withstand an Iowa blizzard. Or it may be anyone of hundreds of ventures in agricultural poetry ever under way by the Bureau of Plant Industry, United States Department of Agriculture.

The bureau's job is to conserve and improve the plant life already here, import and domesticate all foreign or wild plant life that we need or can utilize, and to create new forms of plant life wherever practicable. It is thus the physician-in-chief to all things that grow from roots. It, together with

allied bureaus, is the policeman that guards our manifold plant life.

Its business, in short, is to apply imagination and science toward making the earth crust of these United States "out with" the best and most foodstuffs and clothing-stuffs.

A squad from its forces is now driving the citrus canker into the Gulf of Mexico and thus probably saving the citrus-fruit industry of the southeast from ruin. Another is wrestling with the takeall and the flag smut that recently sneaked in from Australia to prey on grain crops in the middle west. One of its men is probably in China wheedling secrets about plants out of men and lands that never before knew a white man. One may be gathering new varieties of potatoes in the native home of the potato, Peru, where there are many kindred root crops unknown to us. Another is probably nursing sprouts of the tung-oil tree that promise in time to supply millions of dollars worth of drying oil our manufacturers now import.

Keeping Ahead of the Times

VISION? Why they embrace the time when our fields will have to fill a billion human stomachs—the time when the vagaries of the palate will range food realms now strange, the time when our factories will demand raw products now undreamed of as factors in industry. In truth the plant breeder must be leagues ahead of the times.

Romance? There are box-car loads of it in the files, the greenhouses, the experiment farms of the Bureau of Plant Industry. Your poet of plant life has nearly 200,000 species to study, each of many and curious varieties, with emotions as distinct and violent, struggles as intense and aims far more mysterious than those of man.

Results? More food and more clothing for human beings and other animals, more oil for machinery and more colors and color conceptions for the artist. Millions of dollars, as in the cases of durum wheat, the date palm and the Smyrna fig, for producers and manufacturers; for the poet of the fields, the satisfaction of jobs well-performed, and glories embalmed in governmental pamphlets or scientific glossaries.

"We must pursue our work virtually without aid or suggestion from those who will profit or otherwise benefit materially from the results attained," said one of them high in authority. "If the manufacturer, the distributor, the producer, the consumer or his representative would come and place his needs and all the facts relating thereto before us, our work would fit in more closely with the practical demands of the times. Our Egyptian-American cotton industry that simplifies a raw material problem of automobile tire manufacture was developed without thought of tires. In the same realm of industry rubber is threatening problems more difficult of solution. But they can be solved, probably before they become acute. We can grow some rubber producing plants in the United States; our insular possessions, especially the Philippines, probably offer unlimited

opportunities for raw rubber production. To promote it most economically we should have the manufacturer's point of view, his vast amount of practical information. We should know as nearly as possible what kinds of rubber will likely be needed ten, twenty years hence, what price in comparison with other things it will probably bring, the volume that will probably be required.

"The man of practical affairs is prone to fight shy of the government and of such sciences as botany. He views the government as a sort of abstract policeman and much of science as something beyond his ken. Hence, so far as the practical needs of industry are concerned, we must work largely in the dark, leaving results to take care of themselves."

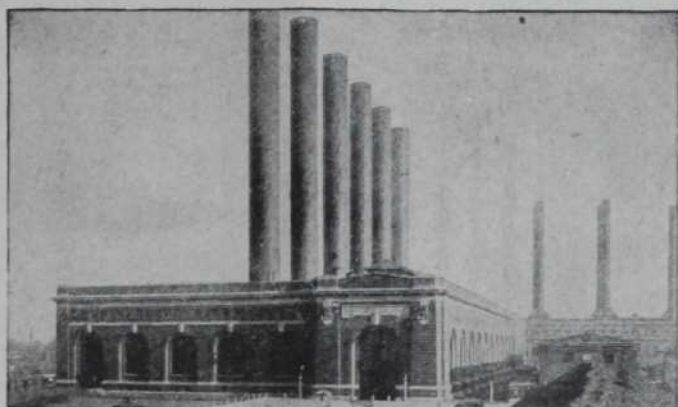
There is a good illustration of the point in durum wheat, a variety brought in from the Russian steppes and adapted by the bureau to the soils of the Dakotas, Minnesota and adjoining states. It was introduced for the purpose of lowering drouth risks and dangers from rust. But, though durum wheat has dietetic value superior to ordinary wheat varieties, it at first had scarce market in America. It is a hard wheat, and the mills as then equipped couldn't crush it. It doesn't produce a pure white bread, so the average American consumer didn't like it. But for the fact that in its early agricultural development Italy supplied an export market for what we produced, it would have been passed up despite its many advantages. Italy took it for manufacture into macaroni. But today, because of durum wheat, we have a big macaroni manufacturing industry of our own, imports having fallen from more than a hundred million to a few million pounds.

A Health Service for Plants

THERE is a primary aim in all the work of the plants bureau. This involves the making war on plant diseases, the importation and creation of new species and varieties, and improvement in methods of cultivating and harvesting.

We have in this country approximately 250 plant diseases of serious import. A few have been eliminated, many are under control and those not here are barred by a rigorous quarantine. What a disease may do is shown by the ravages of the "peach yellows." That undiagnosed and all but uncontrollable plague has, in thirty years, made the peach, a one time universal American fruit, a horticultural orchid.

The fact that there are only a few plant diseases that are native to America would be a curious one but for the allied fact that only a relatively few cultivated plants are natives. Just as our human stock, barring the Indians, are of immigrant origin, so are the bulk of our agricultural crops. America gave to the world such valuable species as the potato—the sweet probably as well as the white, though they are not botanically kin—the tobacco and the Indian corn plants. But no one of them is a native of what is now the United States. They first grew in the



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And we can save you from making those serious fundamental mistakes which frequently occur where institutions improvise their plans in a hurry and repent of their plants at leisure.

We are not only builders, but diagnosticians, and can discuss the adequacy and efficiency of your proposed plant extension from a detached point of view, to which you cannot attach too much importance.

Our Advice is as Good as Our Service

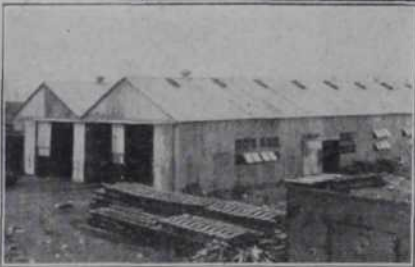
THOMPSON-STARRETT COMPANY.
INDUSTRIAL CONSTRUCTION

NEW YORK

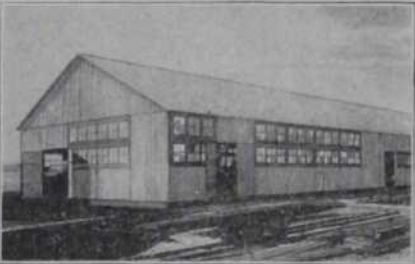
CHICAGO

DETROIT

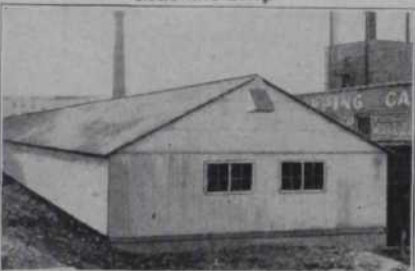
PITTSBURGH



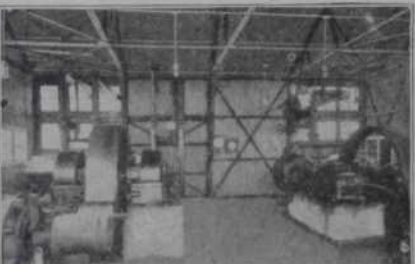
Car Repair Shops



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"Let us build with steel"

STEEL BUILDINGS are replacing other types just as steel cars are replacing wooden cars. The Steel building is stronger, safer, more economical, more sanitary, easier to erect and more adaptable.

The popularity of Stefco Sectional Steel Buildings is not surprising. Hundreds of firms in widely different lines of business have re-ordered as their requirements increased. They are the strongest and most practical form of sectional steel building. We fabricate the units for any size building and they are shipped to you ready to erect on your foundation in a matter of days or hours, according to the size.

Stefco Buildings are designed by engineers, made by experts under highly efficient production methods and can be erected by your own workmen without architect's plans. No expert supervision is necessary. There is no rivetting to be done—just bolt the sections together. And the trusses will carry loads from $1\frac{1}{2}$ to 3 tons.

Every Stefco building "bid" embodies COMPLETE SPECIFICATIONS, which show the REAL COST of the completed building with every unit and part itemized.

Know what you are buying—get the Stefco specifications. Our Service Department will advise on types best suited to your needs, and plan a Stefco building to fit your needs, without cost. Write for catalog and mention width, length and height of side walls of the building you are planning, together with how it will be used.

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southern portion of the hemisphere. According to DeCandolle, the recognized authority on the origin of cultivated plants, only two species now cultivated originated in what is now the United States. One is the Jerusalem artichoke and the other the gourd.

Plant diseases when immigrants are more violent than when native, so we have reason to be thankful for the fact that no more than one-third of those existing have reached America.

In handling a plant disease scientists have to decide whether elimination or control is cheapest. In controlling them resistant species of affected plants are developed or imported whenever possible.

Thus Dr. Walter Van Fleet, a collaborator of the Plants Bureau, has married the lowly chinquapin to the beloved chestnut, and so one of our best native trees and fruits may be saved in part from a blight that has almost destroyed it.

The bureau is also experimenting with a chestnut brought from China, where the ages-old prevalence of the blight has developed a partially resistant variety.

Next to its creations, like the citrange and the tangelocitrus fruits

that will survive outside the sub-tropics and were produced by crosses like one between the grapefruit and the mock orange—the bureau's plant importations are of most romantic interest and perhaps also of most economic value.

Fifty thousand specimens of plants and seeds have been gathered by its explorers from all the avenues of earthly agriculture and tried out with the view of possible adaptation in this country. Many prove unavailable but others already have developed into industries worth millions of dollars.

We are today producing a substantial portion of our dates. The industry, now located chiefly in superlatively hot regions of southern California and Arizona, is the result of studies begun in Persia and Arabia by David Fairchild, the present director of the government's plant introduction work, and continued by various others. Its beginnings involved infinite difficulties, which have been surmounted.

But the growing of the Smyrna fig, also now on a safe commercial footing, involved difficulties of such a semi-selfish nature that a James M. Barrie could weave a romance around it. With the fig had to come the caprifig, a wild variety that fertilizes the cultivated, and with the caprifig had to come a tiny insect which alone is the medium of fertilizing contact between the two.

The bureau has introduced many varieties of such fruits as the avocado, the mango and the jujube, all of which are as conspicuous in some other countries as peaches once were here and will grow as freely in parts of this country as in their native haunts.

The jujube comes from China, where our greatest searches for new agricultural plants

successful here, as well as the growing of such a foreign thing as ginger.

One of the most promising importations from the Orient is the bamboo, botanically a "giant grass," but the most serviceable of all plants in China, Japan and the Philippines. Both the edible and forest varieties are growing successfully in the south.

Another plant explorer, who for only a

short time was connected directly with the Plants Bureau, found in Mesopotamia what is believed to be the wild wheat plant. His name was Aaron Aaronsohn, a native of the Holy Land, who, like Meyer, met a tragical death. He was lost in an aeroplane disaster just after the close of the war. In the midst of hostilities he traveled from Palestine to England by land, which meant that he had to pass through virtually every one of the central allied countries. Arriving in England he tore up his papers, so that he might be arrested and held as a spy, though his efforts were with the Entente. He did it, but vainly as it proved, to save his people from massacre by the Turks.

Other explorers of the bureau have hunted plant secrets throughout

South America and Africa, and from both areas have come many new varieties. From the latter came Sudan and Rhodes grass, the last, being one of the few domesticated plants lately taken from wild life, bears the name of the man who "thought in empires" because it was first grown in and procured by us from Cecil Rhodes' African gardens.

Another African product that has been of immense economic value to America is sorghum. The first varieties came in the sixties, but the corn or grain sorghums came later. It was because a discerning man borrowed a few seeds of Kaffir corn from the display made at the Centennial exposition by the Orange Free State that that product, of immense value to drouth-affected regions in the Mississippi Valley was introduced in the seventies. A thimbleful of the seed propagated by the Commissioner of Agriculture of Georgia marked the beginning of the industry.

It would be unfair as well as inaccurate to say that the kingdom of plant life is being tutored or patrolled solely by government specialists.

"As a matter of truth," said one, "what we of the government do is but a smattering beside what private individuals and concerns are doing toward improving our cultivated plant life.

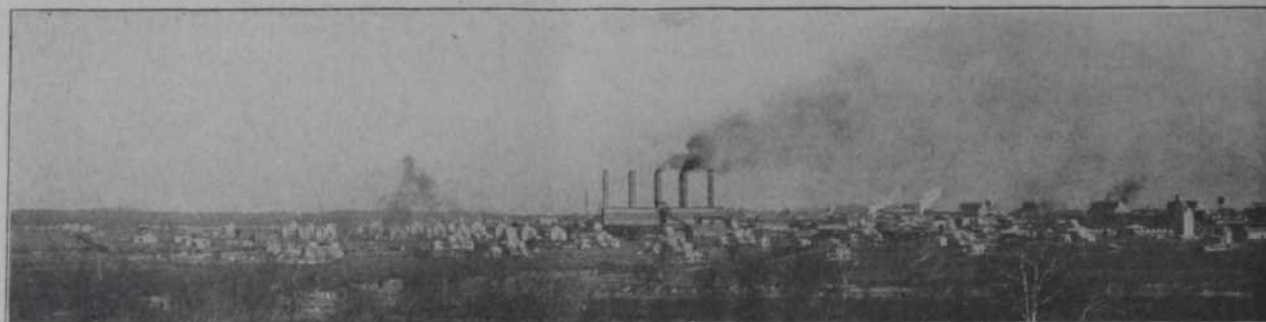


Through lands where few white men have ever been, they pursue their hunt for new plants. More than one of them has lost his life to make the American breakfast cheaper.

have been made. One of the bureau's explorers, Frank N. Meyer, walked over the greater portion of the vast celestial empire, going as far as the Tibetan border and northern Mongolia. Many of his adventures were as bizarre as those ancient ones of Marco Polo. Frequently he was arrested and thrown into prison by strange men who had never before seen a white man. Once he was backed against a wall to be shot. His last adventure so taxed his strength as to wreck his health. On the way to a Chinese port he disappeared from a boat and was drowned.

Making the Peach Warm-Blooded

MEYER found in China the wild peach, which the Plants Bureau believes will supply a stone-fruits stock that will enable peach and apricot trees to survive temperatures as low as 50 degrees below zero. He also discovered and sent to America seed and shoots from a Chinese persimmon tree that bears fruit 4 inches in diameter and can be both seedless and puckerless. He discovered many other varieties of fruits and vegetables that are proving agriculturally successful. It was he who brought in the white-barked pine and the yellow-flowered Chinese rose. He believed that the yang mae, or strawberry tree of Japan, can be made



"OLD HICKORY"

A Complete Industrial Community

As an investment—as a project to be controlled by a holding company for re-sale, "Old Hickory" embodies every desirable feature of a commercial security. Because of its enormous size it is ample for the needs of a group of varied industries. Because of the excellent condition of the several buildings and the careful preservation of the great quantity of modern equipment it is of paramount interest to investors, holding agents, and to those manufacturers who, because of limited capacity, lack of expansion, excessive power costs and other industrial difficulties, are in absolute need of the very advantages which this plant offers. To attempt to detail the enormous quantity of MARKETABLE equipment and surplus property, which has an attractive re-sale value, or to technically consider the various minute data in an advertisement of this size would be vastly unfair to the advantages and possibilities of the plant.

"Old Hickory" is more than a mere industrial war unit—it represents extraordinary opportunities. In a great many fields of industrial endeavor such as: Chemicals, Rubber Goods (especially tires), Pulp and Paper Mills, Sugar Refining, Coking and Coke By-Products; Food, both evaporated and concentrated; Iron and Steel Foundries, Fibrated Products, such as Asphaltum Shingles; Aluminum, Wood Box and Refrigerator Manufacture; Celluloid and Photographic Film Manufacture—the plant units can be modified and the present equipment applied to the production of individual materials common to these industries.

The Government reservation, which houses the plant, offers ample space for the expansion of any single unit. Within the precincts of "Old Hickory" are the largest steam power plant in the country, a water filtration plant sufficient to supply the needs of a city the size of Boston; a complete and correlated network of plant railways, trams, improved roads and tracking, combined with a large reclassification railroad yard; and a gigantic coal handling equipment.

From the labor standpoint the location of industries at "Old Hickory" is especially attractive. Adjacent to the plant is a complete village with a housing capacity for upwards of 20,000 people. The dwellings are of attractive design and well constructed, situated on carefully planned and well built streets. The very atmosphere of the village is CONDUCTIVE TO PERMANENT LABOR. All of the attractive features of up-to-date community life are here. There are general stores, hotel, restaurants, theaters, a hospital, police and fire systems; Y's and civic centers. Practically all the necessities of life can be purchased within the village so that the high cost of living would be considerably reduced. IT IS UNQUESTIONABLY CERTAIN THAT THE HIGHEST CLASS OF SKILLED AMERICAN WORKERS would be content with the home-loving advantages of this village.

LOCATION

The Old Hickory Plant is located on the Government reservation at Jacksonville, Tenn., 15 miles from Nashville, in a loop of the Cumberland River. It is convenient to the Louisville and Nashville; Nashville, Chattanooga and St. Louis and Tennessee Central railroads and within short hauling distance of three apparently inexhaustible Kentucky and Tennessee coal fields.

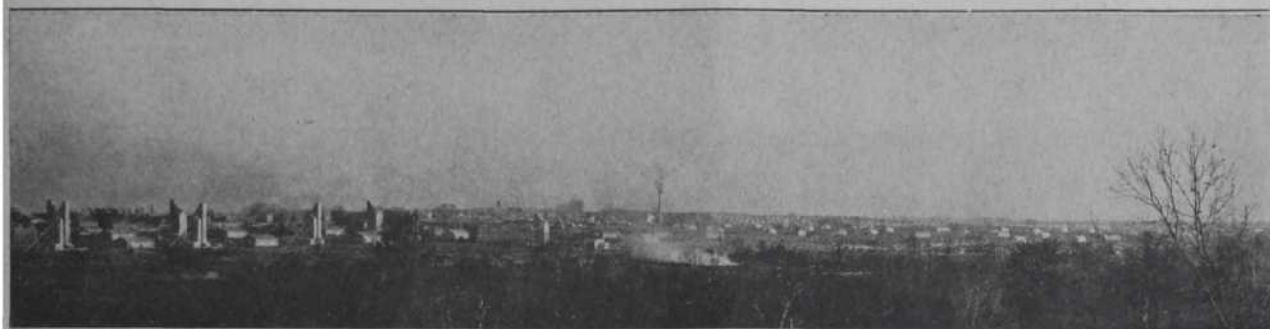
AREA

The Old Hickory reservation comprises approximately 4,700 acres, divided as follows: 1,800 acres devoted entirely to manufacturing purposes, containing 1,021 completed manufacturing buildings, each ready for immediate conversion. Adjacent to the plant is a village covering 560 acres and numbering 3,020 dwellings, with modern conveniences and with electric light and water available from a common source of supply.

**Inspection Arrangements Through
COMMANDING OFFICER, OLD HICKORY POWDER PLANT**

Jacksonville

Tennessee



FOR SALE

By the War Department

POWER

No manufacturing plant in the world ever required more power than Old Hickory. None has ever been so completely equipped. Ample boiler and engine horsepower is derived from a central plant. This plant contains 48 Sterling type boilers of 823 h. p., 5 Turbo-generators developing a total of 11,500 k. w. at 2,300 v. In addition there are scattered throughout the plant 47 heavy-duty simple type Corliss engines.

COAL

A plant of this size requires an enormous amount of coal, which has been amply provided for by a storage capacity of 100,000 tons and a boiler bunker capacity of 5,000 tons. This enormous volume of coal is handled by a most efficient electrically controlled system of belt conveyors, crushers, silos, with cranes and electric weighing lorries. This extraordinary coal handling equipment is convenient, economical and labor saving. It facilitates the conveying of the coal directly from the car hoppers to any point in the storage area or directly to the bunkers with a minimum amount of labor.

WATER

The water supply is more than sufficient for a city the size of Boston. The two pumping stations on the river have a capacity of 100,000,000 gallons of water a day, coupled with a booster system of 37,500 gallons a minute against a 130-foot head. With the exception of cooling, and condenser water, all water for village and other use is filtered and purified. The filter plant consists of 96 gravity tubs with a daily capacity of 65,000,000 gallons.

PLANT TRANSPORTATION

The paramount feature of this plant is its splendid railway and road facilities for the transporting of raw materials and the finished product. This system comprises 54 miles of standard gauge track, 44 miles of tramways and 18 miles of road, 7 of which are of concrete, for heavy hauling purposes. The plant has a reclassification yard with its own engines and other railway equipment, with a capacity of 660 cars. There is also a roundhouse and the necessary shop equipment for the making of repairs.

PLANT DIVISION

The several units of the plant are: Cotton Purification and Nitrating Houses, Filter, Power, Refrigerating, Cauticizing, Sulphuric Acid and Diphenylamine plants, Box Factory, Storage Tanks, "Shook Storage Houses," and a Machine Shop, sufficiently large and equipped to take care of the needs of the several buildings.

TOWN

In order to house the workers employed in Old Hickory, a complete modern town was built, including, in addition to the features listed above, a complete modern sanitary system, with miles of sewers, a sewage disposal and incinerating plant with a capacity of 2,000,000 gallons every 24 hours, a modern water supply system, a large pumping station and reservoir, and a large steam heating plant. The town contains 3,020 buildings, 33 miles of board walk, three miles of macadam walk, and occupies about 560 acres.

It is suggested that you send your engineers to "Old Hickory" and permit them to avail themselves of the courtesies that will be extended for a careful, thorough inspection of each and every unit of the plant and the plant village.

A project so large as this deserves such an inspection. An investor, holding company or manufacturer should immediately take advantage of it.

The Government has never offered so large a project, nor one which presented so many desirable investment features. Wire or write to the Chairman of the Ordnance Salvage Board for permission to inspect, for the submission of SEALED PROPOSALS and for available, interesting technical data.

Sealed Bids will be received up to 10 a. m., Eastern Standard Time, September 2, 1920, by the Chairman, Ordnance Salvage Board, War Trade Building, Washington, D. C.

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*The Business Man's America—No. 5***T E X A S**

A study in bigness; this vast state has had to solve every problem of farming including the replacement of the picturesque longhorn with professional but commonplace beef cattle

By ARCHER WALL DOUGLAS

GEOGRAPHICALLY Texas isn't one state—she's half a dozen; but her very bigness has made her a political unit with definite ambitions of greatness. To the man who is accustomed to touch five states in the five-hour run from New York to Washington, or seven in what seems a never-ending trip from Boston to St. Louis, it is hard to realize that the latter distance can be traveled without leaving the borders of Texas.

The difficulties that Texas has overcome are not those which lead to the publication of helpful little tracts on "Five Acres Enough," or "Marketing Your Surplus Watercress." The state had to contend against the handicap of successive years of drought—of great areas without water.

These are her labors of Hercules, and how she has met them is the theme of Mr. Douglas' story.—THE EDITOR.

AN ESSENTIAL requisite of impartial and unprejudiced study of any state is that the observer go to the scene with a mind not only receptive to new impressions, but free from preconceived opinions. The surest way to avoid such pitfalls is to know too much about the place you visit. As a matter of fact, it is better not to know anything about the state at all, but to acquire all your knowledge during the course of your survey. As this is neither possible nor practicable, the next best thing is to limit your knowledge to some elemental facts of the history, geography and climate of the land you are to study. You will not then go through the often painful process of readjusting practically all the opinions you formed in advance.

Of all the forty-eight states none more warrants the wisdom of unpreparedness, such as I have indicated, than the State of Texas. The numerous stories concerning it, many of them humorous jibes, convey an unfavorable impression which it is hard to resist when you do not know the country from personal observation. Moreover, these impressions are apt to be confirmed by those casual travelers who have seen certain portions of Texas under passing unfavorable conditions of weather or circumstance. From such reports you form impressions of the crudeness of ways and methods of the people, and the impossibility of the climate and of large portions of the country which only actual study assures you are merely seeming.

This is particularly true of all direct and elemental states, such as North Carolina, Texas and Kansas, whose people are not concerned about impressing travelers by being other than natural and without ostentation, and whose vivid state pride takes it for granted that the state and its qualifications speak for themselves in no uncertain tones. Only by being perceptive of such hidden truths can the observer perceive the deep underlying facts of the situation.

The early life of Texas was that of the pioneer American, fighting for his life not only against the savage wild beasts and the equally savage Indian, but against an even worse foe, the Mexican oppressor. The red-blooded fighting man was a concrete and everyday existence and not a mere figure of speech. So the story of the Alamo was likewise the story of Texas grit and courage. It is the only one of the states that had existence—for about a decade—as a free and

independent republic. Its people came from everywhere, though largely from the south. But the leaven of environment was not to be denied, and it is today the only distinctly composite western-southern state in the Union.

The people are of the same composite type as the state, only more distinct and segregated in their differences. The inhabitants of the wooded sections of the east and southeast are much like the people of northern Louisiana and southern Arkansas, while the dwellers in northern and central Texas are more western and less southern. In the south central section and southeast to the Rio Grande there is still another type, easy to recognize but difficult to describe. The west Texan is *sui generis*—very western—just a trifle tinged with the southern flavor, but mostly just Texan.

The Great Basic Industry

AGRICULTURE was and is the principal industry, and thus free from the influence of the great cities and the congested manufacturing centers there has been preserved that pioneer spirit which gave Texas its birth as a free and independent country.

This American spirit found expression in the live stock production which has always been one of the great industries of Texas. The earlier times—the "free grass" period, when fenced-in ranches, and barbed wire enclosures were unknown—were the days of the romance of the cowboys. They were hard riders and brave men—rough but manly—whose life lay always close to nature in the long sweeping prairies.

This same independent spirit found expression in later years in the Granger movements from 1873 to 1895, which swept over the state in an effort on the part of the farmers to try conclusions with some economic laws which seemed to them unjust and oppressive. There was consequently much legislation against the "predatory plutocrat" and much regulation of railroads, some of it hostile, rather than reformatory and regulatory because of practices of exploitation not unknown in those days. The things which were merely hostile have passed away, while needed regulations remained for the general good.

In later years this same spirit took on more constructive phases. The commission form of government in cities is a salient example. It originated in Galveston in 1900, after the flood which almost destroyed the city, and

was an entire departure from all previous forms of municipal rule.

So as time went on the feeling against the railroads and against the power of wealth gave way to the realization that one thing needed for the development of the state was the use of outside capital under regulation that gave it protection and yet curbed excesses.

It is a country of great variety, and of differences so marked as to suggest the inclusion of several states within its wide borders. In the east and the southeast is the forested area, mostly plain country, and much like the neighboring regions of southern Arkansas and northern Louisiana. There is some rough country in the southern central portion and again westward along the Rio Grande until genuine mountains are reached in the extreme southwest. Elsewhere the country is a great plain, sloping upward from the Rio Grande and coastal plains to the upland prairies of west Texas and the Panhandle, the latter being the *llano estacado*, or staked plains of our boyhood maps. It has some natural boundaries, the Red River on the north, the Sabine on the east, and the Rio Grande separating it from Mexico on the south in its tortuous course of over 1,100 miles. In the main, it is a man-made state, rather than a geographical entity.

How Big Is Texas?

IT is the largest state in the union, some 265,000 square miles in area. It is six times as large as Pennsylvania, larger than all the Atlantic states from Maine to Virginia inclusive. From northeast to southwest and from northwest to southeast is as long a railroad trip as from St. Louis to Boston. So the whole thought of the Texan is imbued with the bigness of his state, and is reflected in his ambition for her accomplishments.

The climate is one of the paradoxes of the country. Like that of all the great plains states it is a force to be reckoned with in the days of its wrath. The annual rainfall in the eastern portion averages about 55 inches annually, but decreases progressively westward and south until in the extreme southwest it falls to 5 inches, or the condition of the hopeless desert. The rainfall is most uncertain, because the Lows which form east of the Sierras usually skirt only the upper portions of the Panhandle in their eastward flight.

At times, sometimes at long intervals, the state is visited by a West India hurricane which leaves ruin in its track and is always

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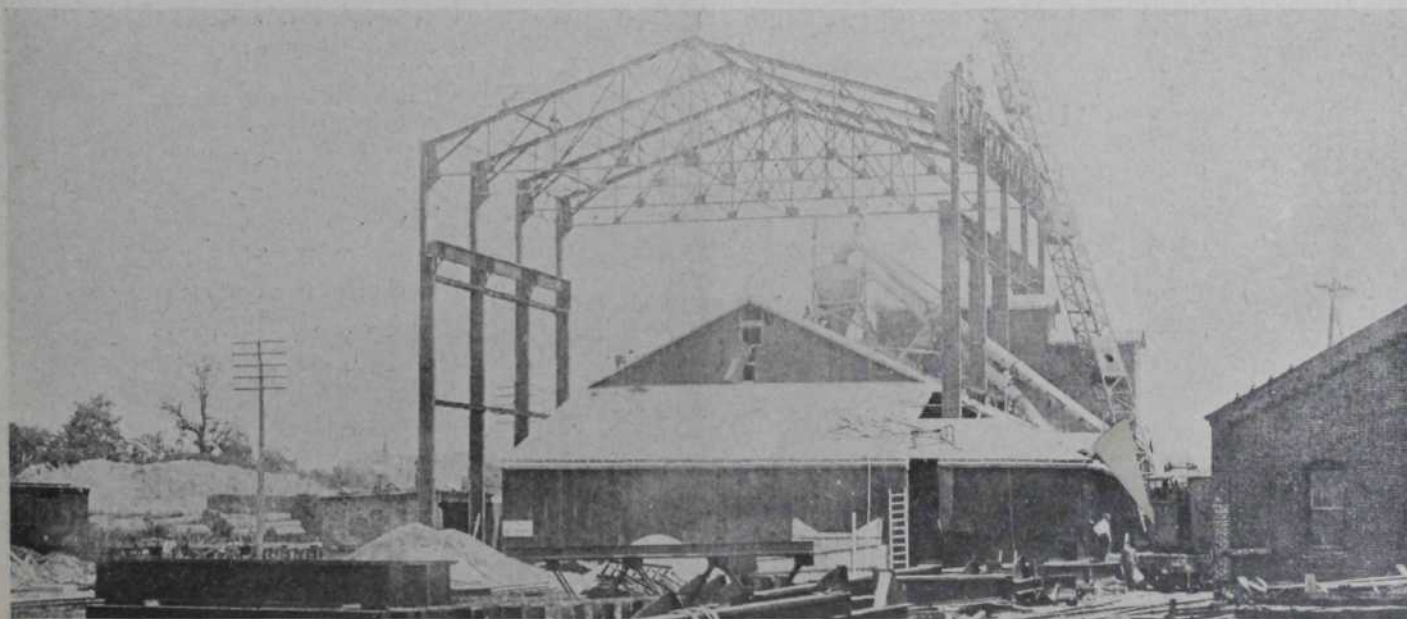
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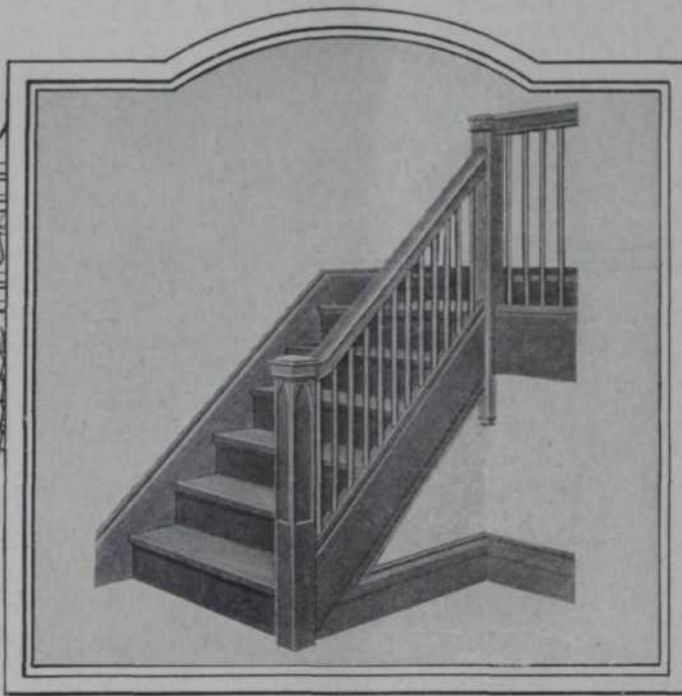
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Solve your industrial housing problem with Curtis Service. Investigate now. Learn how many large industrial, banking and real estate corporations have used the Curtis Service Bureau in the building of small houses in large quantities.

Curtis means individuality, comfort, and beauty plus economy.

For more than fifty years, the name of Curtis on woodwork has stood for all that is good in construction and sound in materials. Not satisfied with anything less than the best, the co-operation of Trowbridge & Ackerman, the noted authorities in domestic architecture, was obtained to design basic patterns for Curtis Woodwork in different type standard sizes. Woodwork of architectural character is the result. Quantity production is now possible because of Standardization. This insures speedy deliveries and low costs.

In addition to designing Curtis Woodwork, Trowbridge & Ackerman have also designed and planned for us more than two hundred small houses using the standard sizes of Curtis Woodwork.

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Make an appointment with our representative and have him explain in detail just why it will be the best building investment you ever made to house your help comfortably in homes that show real charm and that contain conveniences that make contented families.

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accompanied by a deluge of rain. One of these hurricanes completely destroyed the city of Indianola on the Texas coast. Another nearly destroyed Galveston in 1900 and another in recent years inflicted great damage upon Corpus Christi.

In common with all the great plains states the dry years flock together after their kind, and the wet years in similar fashion. Winter is usually the driest season, while the wet springs followed by dry summers, prevailing over central Texas, make it peculiarly favorable for raising cotton.

The snows of winter in the Panhandle have helped to make it a great wheat-growing region. In the northern portion of the state where wheat is grown, a favorable spring means a large yield, as wheat is harvested before the great heats of summer.

Cotton and corn demand entirely different weather in the summer for respective favorable yields. Cotton needs a moderately wet May and comparatively dry June and July. Corn, on the contrary, requires a sufficiency of rain in June and July, especially at the critical stage of tasselling. So it comes about that a large crop of cotton and one of corn rarely occur in the same year.

The droughts which will always be the portion of the state, except in the eastern part, are the fly in the ointment in the agricultural and the economic and domestic life of the people. In some portions of the west and the south these droughts seem endless, lasting in some cases for two and three years. They are most destructive of vegetable life and animal life, completely ruining the crops and causing untold losses among the herds on the great grazing ranges.

Texas is a land of sunshine, which adds much to the potentiality of growing crops, but likewise to the natural dryness of the land. This is increased by the ceaseless winds, which do much to promote the health of the people. The summer heats are tempered by these same winds, especially in the nights which are generally cool. The springs and falls are everywhere delightful, and so are the winters, especially in the southern portion. There are, however, sudden cold winds in the winter, "northers," which bring with them precipitous drops in temperature.

There is underground water in most of the west and south, and it is pumped for moderate irrigation by endless windmills. Especially is this true of the Panhandle, where there is an unending procession of windmills. Every

grazing range, however arid, has its green oasis around the dwelling because of these windmills. There is much irrigation in scattered sections, along the Pecos, the Concho and the Colorado Rivers in the southwest, the San Saba River and the great Medina Dam in the south, the Sabine River

or live stock. There are also about one and a half million acres of swamps, on the south-east coast, which can be drained. The west and southwest have the most extensive cattle ranges in the union. They contain about one-tenth of all the cattle in the country, many more goats—mohair—than in any other state, and great numbers of sheep and hogs. In times of drought, sheep and goats pull through when cattle succumb to the lack of food and water.

In the west and southwest are the debatable lands, where the wet and dry seasons determine whether they shall be for agriculture or grazing. In the years when rainfall fails, not even dry farming can produce crops, and the tide of disappointed "home seekers" ebbs eastward and the cattle graze upon the abandoned fields. When the rains come again in their relentless cycle, the horde of farmers invade the ranges and settle down to agriculture, forgetful of all the years of past failures.

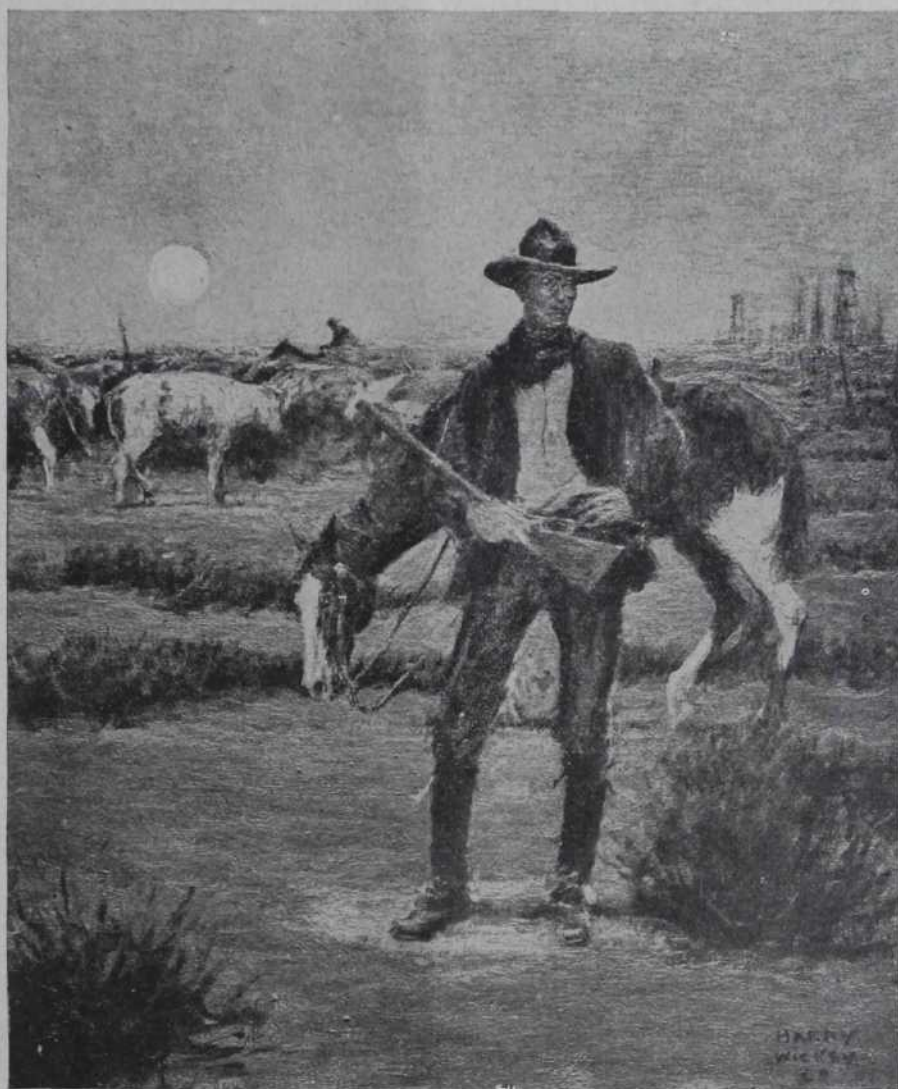
There is increasing production of drought resisting plants, of kaffir corn, milo maize, and of Sudan grass. There are many sunken wells for moderate irrigation for live stock feed. But beyond the western edge of the conflict there is the desert which may never be brought under agriculture and which at this time will serve only the purpose of cattle grazing.

As the state was early settled principally by southern planters, cotton became the leading and almost the one

crop. So in time the state produced from 25 to 30 per cent of all the cotton grown in the country and looked forward to the day when it would grow enough for all the domestic needs of the entire Union. Then came the boll weevil, the consequent bitter disappointment, and almost despair, and the slow recovery through the ways of diversification. The boll weevil is still there, but the fear of it is largely gone, and the old dream of Texas as the great cotton producing section of the country, and of all the world, has returned in full force.

Diversification has come to stay, and Texas is growing more grain and food stuff. In 1919 she was the third state in the production of corn. She is growing peanuts in great quantities and erecting mills to extract their oil. She is raising rice, alfalfa, soy beans, and small grains, often enough and more for her own needs.

Equally has the lesson of intelligence been carried into cattle raising with better breeds. Hereford and Angus replace the old long-



The casual visitor may marvel that the plainsman does not weary of the ever receding horizon and the winds that cease not day or night.

in the east, and the Rio Grande in the south-east. There are about five million potentially irrigable acres mostly from streams. Also there are artesian wells in many sections. The Brownsville and Rio Grande irrigated fields are of comparatively recent date, and are devoted to truck gardening, which has had a checkered existence because of the difficulties and expense in distributing to markets so far away.

Texas has the greatest number of farms and of farm acres of any of the states, and about 24 per cent of the farms are improved. It usually leads the states, or else is near the top, in the value of its farm property and farm products. It raises most of the products of the temperate zone and many of those of the sub-tropical. In the way of fruits it is a heavy shipper of watermelons and peaches; and of onions, cabbages and tomatoes in the way of garden truck.

Owing to the comparative lack of mountains, and of forests, save in the east, most of the land is available either for agriculture

horns which are now almost extinct. The blooded beef cattle have justified their existence by being as good "rustlers" as the scrub longhorn and far better meat animals.

Texas stands high among the states in lumber production, the principal forests being in the east, and in the mesquite thickets of south Texas. There is cypress, tupelo, palmetto and hickory in the swamps and lowlands of the east and southeast and oaks, gum, sycamore and much yellow pine on the higher lands and prairies. There is an intelligent attempt to establish a forestry policy not only for retention and replacement but likewise to inaugurate tree planting upon the endless sweeping plains.

There were originally no great reasons for manufacturing on any large scale since raw material, other than lumber and live stock, was largely absent. Naturally there were cotton mills and cotton seed mills and rice mills. Also much in the way of lumber mills and the finishing of building stones. There were also inevitably packing house plants. Moreover, the northern section of the state became a great center of saddlery and harness making and there have followed many miscellaneous manufacturing activities. There are flour mills for grinding the home grown wheat, while naval stores are among the important productions.

And Then Oil Was Discovered

THERE is also some coal and lignite for fuel. Of late years the wonderful discoveries of coal oil have solved the fuel problem and added enormously to the wealth and productive capacity of the state. It has been known for over fifty years that there was oil in Texas, and not so many years ago the great flowing wells in the southeast—the Sour Lake and Beaumont and Spindle Top districts—were the wonders of their time, and today are still large producers. Within the past decade, and especially the last five years, the scene of activity and production shifted to the northern and western portion of the state where there is now situated the greatest oil producing field in the world and one whose productivity grows steadily as new "pools" are found and new wells drilled.

It was a trying time for west Texas only a few years ago when the beginnings of the oil field were made. The entire western section was in dire distress. From two to three years of unending drought accompanied by fierce heats had destroyed all vegetable life, burned up the crops, wiped out vast herds of live stock, and thoroughly discouraged the people. All who could get away, trekked east and north. Then came the great and astounding discoveries of oil, and the Dead Sea ashes of disappointment turned into the realization of sudden and incredible wealth. Wherever oil was, there likewise was a riot of prosperity and of spending. Men grew enormously rich over night when the drills struck oil. Also drilling and prospecting meant much expenditure and the demand for many commodities. So business was very good and speculation was rife. Burnt up acres that previously could not be given away brought fabulous prices for leases for oil possibilities. Then the thousands who flocked to the new Eldorado needed food and raiment and a place to lay their head. Little hamlets of a few hundred people, grew in a twelvemonth to cities of 25,000 inhabitants.

In the matter of education, Texas is far to the front in the amount of money spent upon her children. For there has been widespread growth in the sentiment for more and better schools in the past score of years.

The State University and the Agricultural and Mechanical College are missionaries of higher and more general education.

There has also been much thought and study given to the production and distribution of agricultural products which the farmers seek to solve through cooperative societies.

Throughout the state there is a fast increasing understanding and appreciation of that more intangible but equally vital form of education where to the knowledge of material things is added the cultivation of a trained and disciplined mind. The best sign is the general dissatisfaction with things as they are in educational matters and the burning desire for things as they should be.

There is a demand for better rural school facilities, for more complete equipment, for larger pay that it may command more efficient teachers and for longer school terms.

The dominant and pronounced factor in the development of the state is easily seen to be a state pride which is always in evidence in every stage of the history of the commonwealth. Its manifestations are unmistakable and it is here that the observer who comes with preconceived opinions is most liable to go entirely wrong. Such an observer wonders as to the source of such widespread local spirit, especially if he visits the state in some of her unfavorable and unprepossessing moods. It may be in the days of summer heats and prolonged drought, or when the plague of insects is great, or when crops have failed and the farming and mercantile interests seem alike close to the ragged edge of disaster. Or he may marvel that the dwellers on the endless plains do not become deathly weary of the ever receding horizon and the winds that cease not day nor night. Or he may pityingly wonder at the lonely existence on the remote ranch in the arid lands where the only green spot in the blistering sun is the ranch grounds by the driven well. State pride, he reasons, built on such foundations must be either blind infatuation, or else the spirit which whistles to keep up its courage.

How the Plainsman Feels

BUT to the observer who seeks to read the heart of things there must come the illuminating sympathy which comprehends every phase of human life. To such the city is merely a pent-up Utica, a stifling thing of conventionality and artifice, of numerous mannikins parading in the guise of human beings.

To the plainsman there comes the realizing sense of the vastness of the wind-swept prairies, and of mental freedom and far-flung vision that cannot brook material bounds. From the beginning it is the sense of the size and vastness of the state which fired the imagination of the people as to the future of their commonwealth. The magnitude of natural phenomena and natural scenery impress us far more than their beauty, and so we expect great achievements of great countries rather than of smaller ones.

The imagery of the sun that never sets on English possessions, and the union of far-flung states stretching from the Atlantic to the Pacific, carries with it the imagination of great characteristics. This feeling lies at the bottom of Texas state pride, and consequently as in every great people or great country there goes along with it the pride of independence and conscious strength that is the captain of its soul, and sufficient unto itself.

So there has evolved a rough and ready democracy. For the people of Texas are a wholesome and husky lot. They are strong in their likes and dislikes, as are all elemental

natures. They are equally sure of themselves and their future. And of this future, economic and social, there can be no doubt. For out of the turmoil of the past they have emerged with an abiding determined purpose and have set their faces like a flint in the ways of advancement and progress.

EDITOR'S NOTE: This is the fifth of a series of geographical character studies by Mr. Douglas. The sixth, dealing with California, will appear in the October number.

Exporting American Sires

THE Foreign Market Service of the Bureau of Markets, in the Department of Agriculture, has just published two picture books for circulation in Latin America, Spain, Portugal, and the Spanish and Portuguese colonies. These picture books have to do with prize cattle, swine, horses, sheep, poultry, etc., for breeding purposes. Both publications are as attractive in color, make-up, design, and general execution as could be desired. One of them is printed entirely in Spanish, and the other entirely in Portuguese.

If you were a Latin American breeder of fine cattle of any description, or other live stock, and wanted to know what the United States had to offer, one of these booklets would be just what you would like to have. In addition to the pictures there is a little text describing the readiness of the United States Department of Agriculture to help foreign visitors and foreign buyers to get in touch with the American breeders. There is a statement of the facilities covered by the various American live stock associations, and details are given concerning the inspection requirements and the protection against disease, and the care in shipping breeding stock in and from the United States.

A year ago the Department of Agriculture sent two of its live stock experts to Europe, and they had no small part to play in arranging for some large shipments of American breeding cattle to France. At present two more live stock experts of the department are on business in Latin America. The publication of these highly illustrated booklets in the native language of the Latin American buyers is the latest, and one of the most substantial contributions which the Department of Agriculture has made to the American export trade.

It was in 1914 that the Bureau of Mines, in the Department of the Interior, issued a pamphlet on "United States Coals Available for Export Trade." A few years later the Bureau of Foreign and Domestic Commerce, cooperating with the Bureau of Standards, in the Department of Commerce, issued an extensive series of American standard engineering specifications in English and Spanish, for circulation in Latin America.

The federal government spends a lot of money in the course of a year in promoting our foreign trade. Fortunately, it has not confined itself to the traditional methods of trade promotion practiced by some of the other great exporting nations. It is too early yet to judge in dollars and cents returns of the results from publication of solid attractive reports on American industries, American products, and American methods, in foreign languages for circulation in foreign countries. Anyone who has observed in a foreign country the eagerness with which a foreign buyer welcomes an old copy of an attractive American trade paper from the files of one of our embassies or consulates, will anticipate the friendly reception in store for these publications in the native language, and will be optimistic as to the results.

HOTEL PENNSYLVANIA

Opposite Pennsylvania Terminal New York

"—and a Good Disposition"

The thing that keeps the hotel man watching out for his p's and q's is human nature.

Equipment—however elaborate or well thought out—and machinery and luxurious furnishings and ingenious comfort-devices are all appreciated by travelers; but they're all forgotten when some human part of the machinery—some employee, and usually some way-down subordinate—makes the wrong sort of human contact with one of our guests.

That, of course, is the big reason why two hotels may be practically alike in size and equipment, and yet as different in character and "disposition", if the word is permissible, as two people of the same weight and height can be. Hotels are a lot like people in "disposition", when you come to think of it.

We think a great deal of the perfection of our equipment. Take the Pennsylvania's telephone system, for instance—with its 3340 phones, 200 telautographs, a staff of a hundred and ten people, and the largest private-exchange switchboard you'll find anywhere. Every part of the telephone service which we can control within the hotel is set up as perfectly as the best brains of the telephone business could make it; and the money it cost is shocking to think of. Yet, if the voice that comes to the guest over his wire isn't tuned just right, or if the brain behind the voice is slow or stupid or indifferent, the whole elaborate equipment is, for that transaction, inferior or "rotten."

That's the human-nature side of it.

But this is what I'm getting at: you can depend upon it that when we put that sort of almost-perfect machinery into our hotels, we aren't going to be lax about the kind of human beings we turn it over to. You can be sure that in any Statler-operated hotel the management is doing its best all the time to see that the human element is kept as carefully up to par as the equipment. We want every guest to be "handled" like the intelligent, reasoning, fair-minded being he is (and practically all our guests are all those things); and if you, patronizing any of our hotels, ever fail to get the sort of treatment we want you to have, the manager of that hotel wants to know it—and he'll do something about it, too.

By the way, I've often asked business men (I especially enjoy asking salesmen) how they'd like it if they had to do ninety percent of their business with men who have just finished a night's ride in a Pullman, or who are hungry, or both at once. That's how the hotel man gets to know something about human nature.



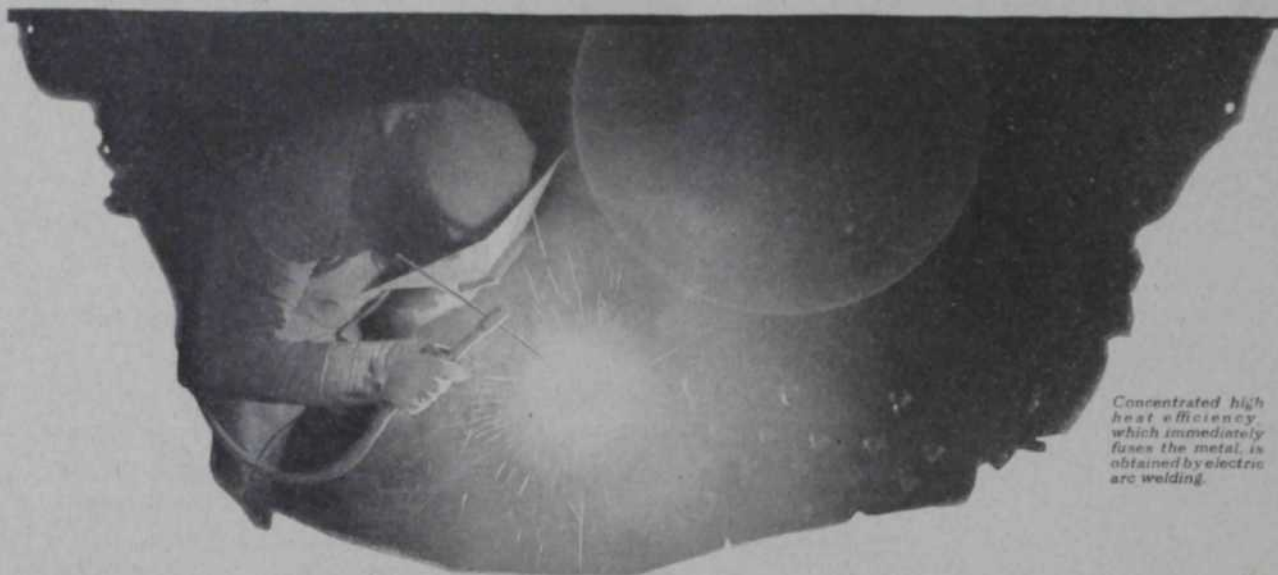
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Hotel Pennsylvania, with its 2200 rooms, 2200 baths, is the largest hotel in the world—built and operated for discriminating travelers who want the best there is.

Associated with it are the four *Hotels Statler* in Buffalo, Cleveland, Detroit and St. Louis; and each of these five hotels makes reservations for all the others. All have private

baths, circulating icewater and other unusual conveniences in every room. An entire block of ground in Buffalo has just been purchased, for a new Hotel Statler.

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Stationary Arc Welding Set is easily installed for operation



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Tilting Type Electric Brass Melting Furnace—2250 lbs. per hour



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Electric Soldering Iron—Production Helps in Booklet B-3514

Utilize electric heat to the utmost

The essential value of electric heating equipment to modern industrial development is apparent in the large demand for various installations of this order to meet increased production schedules.

Slow and laborious processes which retard production must give way to units that employ electric heat—and one of the most essential of the improved methods is electric arc welding.

Electric arc welding maintains advantages in quantity, quality, and cost—wherever iron or steel is to be joined in repair work, salvage, or original manufacture. The utilization of its possible applications extends over steel and iron works—boiler shops—foundries—repair shops—machine shops—and innumerable other industries.

An unusual simplicity and elasticity of operation has been perfected in the designs of Stationary and Portable Arc Welding Sets manufactured by the General Electric Company. This equipment can be provided for either group or single operator service, and generator can be driven by any source of power—engine, belt, d-c. or a-c. motor. Send for Bulletin 48932-A.

To stimulate correct operation, the General Electric Company has established an Arc Welding School at Schenectady, which offers exceptional training in horizontal, vertical, and overhead welding under actual production conditions—free to a limited number of men. Bulletin No. 48953 sent on request.

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43-501

The Grain Trade's Gyroscope

Chicago's Board of Trade acts as a great stabilizer for the world's supply of bread; here is an inside view of how this famous institution does its work

By ROBERT H. MOULTON

MOST OF THE GRAIN produced in the United States must be handled within a few months. This means that about one billion bushels of wheat, three billion bushels of corn, one billion bushels of oats and hundreds of millions of dollars worth of provisions must be distributed evenly. If there were no machinery for this purpose, there would be hopeless congestion at one period and long periods of dearth. The grain exchanges of the country provide such machinery. On the Chicago Board of Trade alone more than 400,000,000 bushels of grain and 600,000,000 pounds of pork are bought and sold each year.

The Chicago Board of Trade, like all other grain exchanges, may be defined simply as an organized market place which enables people to buy and sell freely certain commodities either in person or through a broker, and which, in order to facilitate such trade, has for its fundamental objects the promotion of uniformity in customs and usages, the inculcation of principles of justice and equity in trade, the facilitation of the speedy adjustment of business disputes, the dissemination of valuable information, and the securing to its members all the benefits of cooperation.

The exchange itself is not organized for the making of money and does not fix prices or make transactions in the trade as an organized body. It is merely instrumental in affording a convenient market place, in regulating trade and in disciplining the conduct of its members. Its members act on their own responsibility. They may do as much business as they like, provided they conform to the standards which the rules of the exchange prescribe for the regulation of the trade.

Well, Few of Us Are Angels!

IN the free buying and selling of our vast crops by thousands of middlemen, it is not at all surprising that many questionable practices should arise. Great importance should therefore be attached by all interests coming in contact with the market to the disciplinary rules which have been adopted for the regulation of brokerage transactions, and the maintenance by this means of standards of commercial honor in the trade very much higher than would otherwise be the case. Care is exercised in electing members to the exchange, and, when elected, the new member obligates himself to abide by the constitution of the exchange and all subsequent amendments thereto. Expulsion is the penalty in case a member fails to comply with the terms of any business obligation or with the award of any committee of arbitration. No member is allowed, under any circumstances, to be both principal and agent in any transaction.

For the benefit of the trade the exchange regulates the inspection, grading, weighing, storage and shipment of grain, the brokerage charges for the various types of services rendered, and the deposits necessary to secure the fulfillment of time contracts. Trade com-

Shall We Praise It or Damn It?

THE Chicago Board of Trade is again on a pre-war basis and its reopening has stirred farmers, grain dealers and millers to a new consideration of the old question: Is it a force for good or for evil? Herbert Hoover once said that the Board of Trade was "the most economical agency for the distribution of food in the world." Typical of the radical farmer comment is this:

"If gambling in wheat is a good thing, why not establish boards of trade for clothes and automobiles?"

In this issue of *THE NATION'S BUSINESS* will be found in the "Observatory" some current comment on this nefarious (or praiseworthy) institution. With it we present Mr. Moulton's careful study of the methods of the Chicago Board of Trade and his conclusions as to whether it performs a real service or is simply a parasite that should be wiped out. —THE EDITOR.

mittees are appointed for the several kinds of produce to decide disputes and interpret the usages prevailing in each. Weighers and inspectors are appointed and licensed, and agreements are frequently effected with warehousemen and transportation companies.

And lastly, among the many other rules enforced, should be mentioned the practice of arbitrating all business disputes, quickly and cheaply, and with the understanding that purely technical provisions should be no pretext for the avoidance of contractual obligations. So high is the standard of the decisions of the committees of arbitration that they are often given the force of law by the highest courts.

Sales on the Board of Trade are of two main classes, "cash" or "spot" transactions, and sales for future delivery, usually called "futures."

The difference between these two types of transactions consists merely in the time when the title to the property changes. The "cash" transaction is a "sale" as soon as completed, while the "future" contract is defined as "a contract to buy, or a contract to sell at some definitely prescribed future time."

It is common for the press and the public to attach undue prominence to the buying and selling for future delivery, and to overlook the fact that the original and basic object of the exchanges was to furnish a convenient meeting place for the buying and selling of "cash" grain, cotton and provisions, and that today an enormous volume of such cash business is transacted upon the "cash" tables which line the floor of every exchange.

The Board of Trade is not unlike, in substance, an ordinary auction where the price that the article brings is determined by the demand of the bidders for the article being sold. But here the similarity stops, for commodities are dealt in upon the exchange floor which have a world market, whereas in the

auction room the price obtained may be determined by the individual fancy or cupidity of the buyers. The board is nothing more nor less than a great central market for the buying and selling of grain.

It is not contended that it would not be possible to market grain if every exchange were closed any more than it would follow that the world would be in darkness if lighting by electricity had never been discovered, or that business could not be transacted without the telephone, the telegraph or the typewriter. Even without the exchange a broker could sell a consignment of grain or provisions by traveling the length of South Water Street, Chicago, for example, or communicating with several hundred millers or grain dealers throughout the country. But modern business, and particularly the business of marketing the grain and provisions of the country, has grown to too great proportions to permit of such an unwieldy and costly system.

In order that buyers and sellers may have all information possible to guide them in reaching their opinions as to values, the Board of Trade acts as a clearing house of data upon crop conditions, shipments, visible supply and so forth. Through a system of news service, necessitating the cooperation of thousands of correspondents and agents, there is collected here all information likely to have any effect upon the trade, including prices of the different commodities throughout the world, and all this information, as currently received, is given immediate expression in the form of purchases and sales at prices which are immediately transmitted by wire to all the trade centers, and soon made available to the general public by the daily press. Communication by wire and the ticker has connected the world's exchange markets so as to make them practically one.

Discounting the Future

THE value of this prompt and elaborate collection of trade information is fourfold: it makes possible the discounting of the future, it steadies prices, it helps to regulate the rate at which the year's crop is consumed, and it serves to level prices between different markets.

The sales of "spot" or "cash" grain on the Board of Trade are carried on through the medium of samples which are displayed on half a hundred tables on the floor of the exchange. The samples thus displayed come from cars which arrive daily in the railroad yards and are brought over from the State Grain Inspection Department each morning before the opening of the board. Every morning about 4 o'clock the State Inspectors go 10 or 15 miles out into the country to railroad yards where some three or four hundred cars of grain are located. It is their duty on these trips to make a record of the seal number of each car, inspect it for leaks, and take samples from each end and middle by means of a long brass plunger. These samples are then thoroughly mixed, placed

Every Figuring Task Simplified by the Dalton

Taking trial balances, and extending inventories, used to be thought irksome by the retailer.

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Agents for Canada, The United Typewriter Company, Toronto and Branches

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put—checking invoices, fig-
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involves adding and calcu-

Dalton

Adding-Calculating Machine

in a small bag and carried to the State Grain Inspection Department.

Upon arrival there, each sample is poured into a pan and examined by an expert grader and inspector of grain appointed by the State of Illinois. This man has before him the wheat or corn grades, as the case may be, lately established by the Federal Government, showing just how much moisture, dirt, cracked kernels and foreign matter each grade of grain should contain. He quickly decides all these questions but that of moisture. The sample of grain is then taken to the test room, where the moisture is cooked out by scientific apparatus approved by the Government and this final fact determined. The sample is then poured into a paper bag, on which is marked the car number, its location, and is then ready to be delivered at the Board of Trade.

As soon as the samples arrive on the trading floor they are transferred to the tables. Each table may contain from one to fifty samples. They are then opened and looked over by the floor men who have already received notices from their shippers, stating what each car contains and the neighborhood from which the grain was shipped. Armed with these facts about the different cars, the samples of grain, and a knowledge of the world's markets, the commission man is ready for business.

Competition has driven the commission merchant to render every possible service to the country shipper. He not only hires the most expert salesmen to operate for him on the floor, and spends a great deal of time and effort to keep in touch with the best buyers

so as to make a good showing in the sale, but he supports several other valuable departments. His traveling men are selected partly because they are familiar with the business and can give aid and advice in all departments of the country grain business to the country shipper. He makes it his business to collect claims from the railroad companies for loss in transit, he settles promptly, he follows the car to hurry its unloading, and, above all, he is constantly looking for the high market in the interests of his shipper. It is clearly to be doubted whether there is any other business handled on so close a margin, when the money risk involved and the many services rendered by the commission merchant are considered.

As to the Commission Man

THE commission merchant must not only be honest in his effort to secure the highest price for his client, but he must know how to do it. He must know grain, and the better he knows it the better for him and his client. He must also know geography. He must know where the bulk of the grain is and where the bulk of it will be needed. He must know market conditions the world over. When this kind of service can be secured, and it is the opinion of successful country grain men that such service is available in the large terminal markets, then the producer who consistently consigns to reliable commission merchants undoubtedly fares the best in the long run.

Another method of disposing of grain on the Board of Trade is the selling of grain "to arrive," in which the seller, who is usually a

country elevator operator, agrees to ship or deliver a certain quantity of a specified kind and grade of grain within five, ten or twenty days, or for shipment during the next month or for an even more deferred delivery.

It is in connection with a class of transactions referred to as "futures" that most of the misunderstanding on the part of the public exists. Buying and selling for future delivery in the pits simply means that the sellers agree to deliver a certain kind and grade of grain in a terminal elevator during a certain month. These transactions are all based on the actual delivery of the grain, and unless these contracts are satisfied in some other manner the buyer receives elevator receipts which convey to him the ownership of the full amount of grain that he has bought, just as a real estate deed conveys title to a piece of property.

The so-called speculators, including even the "short" sellers of grain and other commodities, are an important and valuable factor in any large market as they act as a balance wheel and prevent an abnormal rise in prices when the demand temporarily exceeds the immediate supply, and check declines when the movement is heavy and when, without their buying to fill contracts, prices would be depressed. Without these traders in grain, it would be much easier for a few large corporations to unduly depress prices when there was a heavy movement of grain and when the farmer is most interested in having prices maintained. In a similar way prices might be unduly inflated when the movement was light and the farmer had very little to sell.

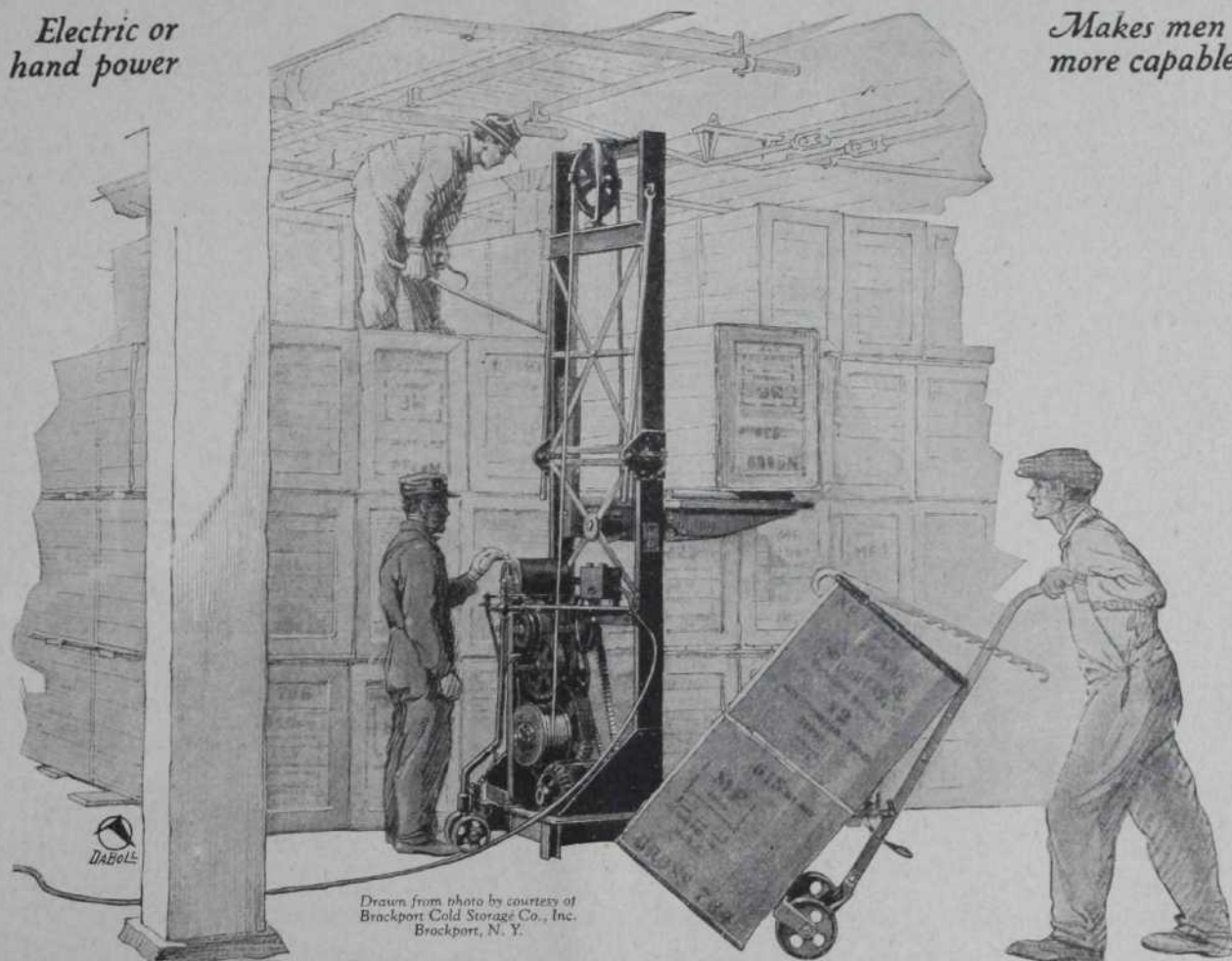


The public is apt to overlook the enormous sales in actual wheat and other foodstuffs that are made on the floor of the exchanges. The men in the picture are buying wheat by sample.

Grain carefully mixed and graded is taken from the wheat car when it reaches Chicago. These samples have their history printed on the outside. The grain and legends guide the buyers' bids.

*Electric or
hand power*

*Makes men
more capable*



*Drawn from photo by courtesy of
Brockport Cold Storage Co., Inc.
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Investigation will prove the value of the P.A.X. to your organization. A booklet giving further details, will be gladly sent upon responsible request.

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Every thoughtful man who will study the businesses of the world as conducted today must see that in all lines the future contract is a necessity. The world is fed, clothed, and transported by supplies furnished on future contracts. It is self-evident that the business of the country could not go on for a day if the builder could not buy lumber, the manufacturer buy wool and leather, the railroads buy steel, and innumerable other things, weeks, months, and sometimes years in advance.

But the speculative features of transactions in futures is only incidental, for these contracts perform an important service in that they furnish insurance against the losses that would otherwise be suffered through rising and falling prices, delays in shipping, and other uncontrollable market changes. This form of protection, which is found in the marketing of cotton, wool, provisions, coffee and other farm staples, is known as "hedging."

There are great risks in the growing of grain. But these are insured automatically because grain is raised by tens of thousands of farmers, and individual losses through bad weather, pests, and so forth, are distributed among them all. There are risks connected with the storage and handling of grain that could be distributed in the same way among consumers, bakers, grocers and millers if the crop could be sent directly from the grower to the thousands of persons who distribute and eat it.

But this is not possible. The farmer sells in a short harvest season, and the consumer wants the grain doled out to him in small quantities through the coming year. This calls for storage in elevators and warehouses, and the risk is thus concentrated on a few handlers, who must have some protection.

To get protection, the big handlers go into the grain exchanges and buy or sell, just like speculators. But instead of engaging in

speculation they are taking out insurance policies. This protection is so genuine and valuable that the Department of Agriculture at Washington has recommended hedging as a safeguard in sound marketing.

The country grain buyer has 5,000 bushels of corn in sight for September delivery at his elevator, we may suppose. He bought it early in August at \$1.25 a bushel, believing it would bring a price sufficiently higher at the nearest terminal market to pay shipping charges and net him a profit of three cents a bushel. To hedge this grain, and insure the price, he sells by wire, through a broker on the grain exchange in his terminal market, 5,000 bushels of corn. He does this as soon as he has struck his bargain with the farmers for corn still ripening, and sells on the exchange at the price he expects to receive at the terminal market when his grain is actually delivered there. His exchange sale will be for December delivery, which gives him ample time to get his grain to market.

Having done this he can go ahead with his corn deal at home in perfect security. For, no matter what happens to prices now, he is safe. The farmers may be two weeks late with harvesting, or the railroads may delay in furnishing cars. No matter; he should worry! For he is insured on that particular 5,000 bushels.

Some speculator on the city grain exchange has agreed to pay him a stated price for 5,000 bushels of corn in December, just as he has agreed to pay the farmers a stated price in September, and the exchange speculator's agreement is backed by ample credit, so there will be no failure in keeping it. If his transaction runs into 50,000 or 100,000 bushels, probably the exchange sale was made to half a dozen or more different speculators.

Or, suppose a flour miller takes a contract for flour to keep his plant running for several

months, agreeing to deliver the flour at a stated price regardless of market fluctuations. This flour price is based upon the price of wheat at the time he signs the contract. To protect himself by hedging, he does just the opposite of what was done by the grain buyer, wiring an order to the nearest grain exchange to buy so many thousand bushels of wheat for delivery at the time his flour contract is to be completed. If the price of wheat rises he is protected by a speculator and loses nothing, and so can operate his mill, pay his employees' wages and fill his contract in peace of mind.

The difference between hedging and speculating is not clearly seen by everybody at first sight. Yet it is as great as the difference between black and white. For the speculator takes a chance on the market, and the grain handler who hedges insures himself against just that chance. The speculator is presumably in a position to lose his money if the market goes against him, and that is why he speculates. The grain dealer and flour miller are not in a position to take any such chances, and that is why they hedge.

Losses through unhedged grain in the hands of country dealers have been so great during the last few years that the big grain exchanges are taking steps to make hedging easier for men who handle small lots of grain, thus extending to them the advantages of this insurance. The Chicago and Kansas City Boards of Trade never permitted transactions in lots less than 5,000 bushels until a year or two ago. This trading unit was the smallest that a broker would buy or sell. On less than that it was not possible to make a profit.

It was seen, however, that the country grain dealers needed exchange facilities different from those available to speculators, and so the unit has been reduced to 1,000 bushels for their benefit.

Sugar from Pumpkins and Palms

If you haven't either at hand, save your sawdust, but the result will not be so good. Already East Indian palm sugar is reaching Scotland

By J. W. BISHOP

NO ONE complains that the price of sugar is too low or the output too large. In Cuba the leading planters have agreed to put their unsold sugar into the hands of a common agent and hold it for 24 cents a pound. The one bright spot is a promise that the beet sugar production of the United States will be the largest in its history.

In France the sugar output is threatened by the manufacturers of alcohol. Last year nearly a fourth of the sugar beet crop was diverted to the alcohol makers at a time when France was importing sugar in large quantities at an almost ruinous rate of exchange.

But why limit our sugar production to the cane of the tropics, the beet of the temperate zones and the modest yield of the maple trees of our northern states?

"Why not the pumpkin?" is the answer of the sugar chemist. That pleasing vegetable which grows almost anywhere can be weaned away from its uses for pies, jack o'lanterns, and cattle feed and from it can be made a considerable amount of crystallizable sugar. Its yield in weight per acre is greater than the sugar beet. Six per cent of sugar can be readily obtained with possibilities of a much higher yield.

Sugar from pumpkins is declared to be perfectly white and of an agreeable flavor. It is also said that sugar has been made from watermelons.

Another source of sugar is the palm tree. In Bengal two varieties are cultivated for that purpose, though the industry has been for years a declining one. The Phoenix palm, one of the sources of East Indian sugar, will yield with the crudest methods of cultivation and manufacture, about 24 pounds of gur or coarse sugar per tree. With 300 trees to the acre which would be the limit under scientific cultivation, the yield per acre is better than sugar cane and modern methods of refining would greatly advance the output.

It is noteworthy that this gur or jaggery—there are five or six other ways of spelling the two words—which is the common brown or black sugar of the East Indies, has been arriving in small quantities in the Clyde for the refineries of Scotland. It is not impossible that Angus McPherson may sweeten his porridge with palm sugar while Hank White, of Oldtown Crossings, Vermont, is putting pumpkin sugar on his buckwheat cakes.

Of course we can always make sugar from

the woodpile but the trouble is that the sugar isn't sugar as most of us know it. So it is hardly worth while to start saving sawdust.

The New York State College of Forestry has been struggling with this problem and Dr. Louis E. Wise, the professor of forest chemistry, isn't very cheerful about the result.

"An important sugar can be prepared from sawdust by hydrolysis with acid," says Dr. Wise, "but it must not be confused with the sugar of the breakfast table. This sugar, prepared from wood, is dextrose or glucose, and is identical with the sugar obtained by acid treatment of starch. The sugar is not identical, however, with sucrose, commonly termed 'cane sugar' or 'beet sugar.' Glucose is, however, widely used commercially, and is an important foodstuff. It is the principal component of corn syrups and the like, and has distinct nutritive value.

"The commercial production of glucose from sawdust or other sources probably merits thorough investigation. On the other hand, it should be clearly understood that glucose is not cane sugar, and that the term 'sugar,' as commonly used by the layman, refers to sucrose or cane sugar."

Business and Human Beings

Fragments of wit and philosophy from the typewriter of one who has made a long and careful study of the human side of commerce and industry

By FRED C. KELLY

THE ideal executive is one who never does anything that can be done by anybody else, and yet is always busy.

The beauty of being an executive is that one may be accomplishing just as much when apparently not doing anything as when humped laboriously over a desk. I know a man who says he often does his most important thinking while shaving.

An executive once said to me, as he closed down his desk to go to a ball game at 3 o'clock: "Business isn't an endurance test. Tomorrow I may have to be here until 6 o'clock. But today, when I don't, I'm going to grab off a little recreation. I'm not going to stay here just to try to make a record for the number of hours I put in at the office."

When Henry Ford put his famous \$5 a day minimum wage scale into effect, he might have said to his men: "Work a little harder and you will make more money." Instead he said: "Here's more money for you. But unless you work harder and earn this increase, we won't be able to keep you." He knew that a man will work harder to keep what money he already has, than to get a promised return that he has not.

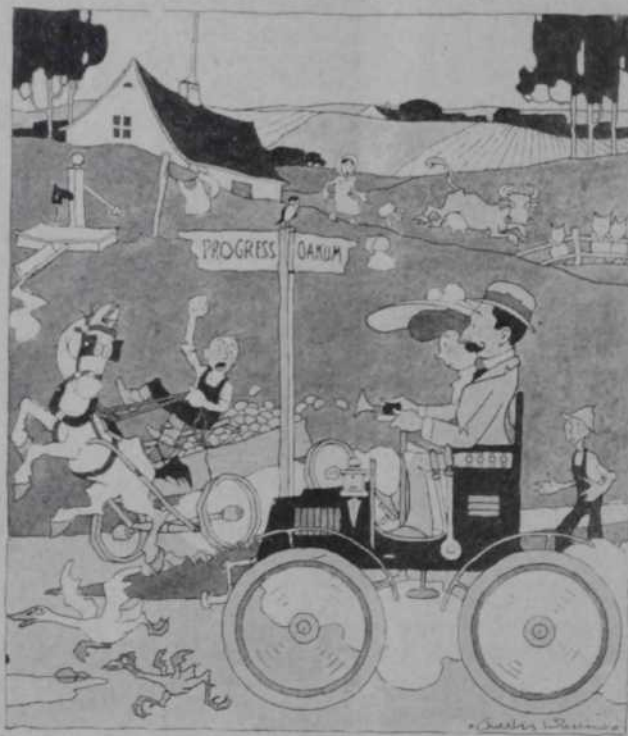
It is unwise to try to introduce an important new idea to a man on Monday morning. The heaviest mail of the week arrives on Monday, and for various other reasons the average business man is more busy then than on any other day of the week. He does not wish to be disturbed. Anyone trying to sell him anything then must first overcome a strong prejudice against himself as an inopportune caller.

Admiral Samuel McGowan, paymaster general of the United States Navy, noted for his efficiency methods, usually aims to be out of his office on Monday morning. He says a lot of people take advantage of their Sunday leisure to think up foolish or annoying requests to make of him on Monday.

Somebody ought to write a ponderous book on "How to Resist Salesmanship." Tons of books and correspondence school courses have been written on how to sell, but I do not know of a single work on how to avoid buying. The gifted salesman comes in fortified with weeks of study on how to present his selling talk. Any objection the prospect raises is answered so plausibly by the salesman that the victim feels foolish and often buys what he does not want. All the buyer can say is what he can think of on the spur of the moment. Hence he can't cope with a man who has been thinking for months about what he is going to say.

I once asked a famous bankruptcy lawyer why so many business men at some time in their careers became insolvent. Promptly he replied: "From overbuying."

Twenty Years Ago Today in Industry



The Horseless Carriage

When a man lends money, even to his best friend, he ought to take security. Otherwise the friend will feel under so much obligation to him that he will begin to avoid him. In avoiding him he will unconsciously come to think of him as somebody unpleasant, and will gradually acquire a dislike for him. Thus the lender will lose a friend.

It is human to have a strong aversion to wastefulness. Give a woman free seats to a theater that she really doesn't care to see, and she is not unlikely to spend \$3.00 or \$4.00 in taxicab fare—to prevent having the tickets go to waste. Nothing worries the average man more than to see his trousers wear out before the coat and then have the coat go to waste.

Most people hate any form of novelty—until they get used to it and it ceases to be a novelty. Farmers were the most bitter antagonists of automobiles at first—and yet farmers were in greater need than any other class of people, of the quick form of individual transportation that automobiles provided.

Men are often slow to observe obvious things of vast commercial importance. It was years before great retailers began to

realize the advantage of being on the shady side of the street. Yet nearly 25 per cent more people walk by the stores on the shady side than on the sunny side of a business street. The shady side is cooler in summer and more likely to be free from slush in winter. And the foot-steps that seek the shady side are a valuable business asset. Yet, I repeat, it was only in comparatively recent years that merchants took such phenomena into reckoning.

One of the greatest assets to any business man, whether employer or employe, is courtesy. It is often the most expensive thing in the world to go into the market and buy, but the cheapest thing to produce right on the premises one's self.

It often happens that a marvelous business executive, who would not think of having a larger store or factory than his business requires, nevertheless loses all sense of proportion and values in his personal affairs. Nearly every man of wealth has a much larger home than he needs—just to show the world his ability to own such a large place.

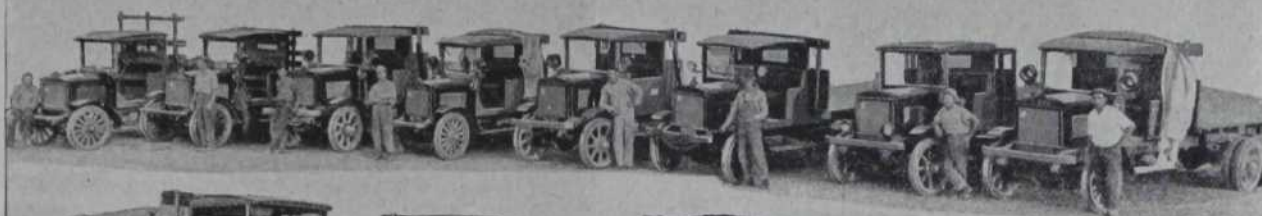
The average business man would be astonished at the value to him of the telephones in his office. Not long ago a New York lawyer had his name accidentally omitted from the telephone directory. He had the phone, just the same, understand, only his name wasn't listed. And he sued for \$20,000 damages.

Another strong human impulse is the something-for-nothing instinct. Many a newspaper man has made it a practice to buy at regular prices supposedly complimentary theater tickets to give to advertisers with whom it is desired to curry favor.

Before hiring a man on the strength of his letters of recommendation, it is well to remember that there is many a man to whom one might give a strong testimonial in order to get rid of him.

A man who says a thing can't be done should bear in mind that his testimony is entirely negative. In court negative testimony never gets as much weight as positive. If one witness says he heard a clock strike at a certain time, and another man declares that he didn't hear such a sound, the one who says he *did* hear is more likely to be telling the truth. When a man tells me a thing isn't so, I ask him: "Then what are the facts?"

When a man rents a store he buys two things—space and location. And it depends on circumstances which is more important. If he has a store 10 feet square on the busiest corner of the world, he can sell any one of a number of articles and grow rich.



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"Loading the famous Imperial Valley cantaloupes 119 ft. below sea level with temperature 112° in the shade, 130 to 135° in the sun. During the cantaloupe season these trucks work 18 hours a day. No paved streets, but roads of silt deposits from the Colorado river."

The Nation's Business Observatory

Transportation, the outstanding "if" of industry—The railroads' platform of increased efficiency meets approval—Increased freight rates taken calmly—Construction men oppose coal priorities—Grain trading again

IN EVERY LINE of industry the outstanding "if" is transportation. In no branch of business, be it textiles or leather, wheat or hogs, lumber or cement, is any promise or prediction made without the qualifying clause "if the railroads—." The railroads' platform of improved service and the willingness of shippers to accept increased rates, if only transportation be bettered, are both encouraging.

Much interest is shown in the reopening of future trading on

the Chicago Board of Trade and with it comes a renewal of the debate as to whether the exchange is a bandit who preys upon the helpless farmer or a kindly guardian who sees that he gets a fair price for his product.

Europe's surprising comeback in cotton manufacturing encourages the southern grower, while there has been a notable gain in the number of spindles in operation here in the first half of 1920.

Railroads Agree to Make the Most of What They Have

THREE THINGS have kept the railroads in the mind of business: The railroad executives' pledge of "intensive service," the extension for an additional thirty days of the order giving priority to the use of the open-top cars for bituminous coal loading east of the Mississippi, and the award of the Railroad Labor Board increasing wages about \$600,000,000 annually, with the inevitable result of further additions to freight and passenger rates.

The railroads' promise was in effect:

An average daily minimum movement of freight cars not less than 30 miles.

An average loading of 30 tons per car.

Reduction of bad-order cars to a maximum of 4 per cent of total owned.

An early and substantial reduction in the number of locomotives now unfit for service.

More effective efforts to bring about the return of cars to the owner roads.

Under the heading "It can be done; It Must Be Done!" *The Railway Age* says:

Mr. Willard set an extremely high standard for the railways; but an improvement in car circulation one-half as great as he named would improve the situation immensely.

As Mr. Willard pointed out, an increase of one mile per day would enlarge the available supply of cars by 100,000. An increase of one ton in the amount of freight loaded in each loaded car would enlarge it by 75,000. A reduction of one-half in the number of bad-order cars would increase it another 75,000. Probably it is practicable for the railway managers, with the cooperation of labor, the shippers and the regulating commissions, to effect this great improvement. But it will require herculean efforts. One question which will arise in the mind of every operating man in connection with this matter will be as to whether it will be possible to get enough labor to do the work needed and whether labor will do the work for which it is paid.

Recognizing that the railroad problem is one of securing greater efficiency in the use of the plant now existing, *The Iron Age* says:

If the traffic situation is not speedily improved, within a period of months, the issue of government ownership and operation will be presented again, and he is a resourceful and ingenious man indeed who can outline how it will be possible to meet propaganda along that line.

There can be no doubt whatever that the shippers as a body do not desire a change from private to public ownership and operation . . . but the practical question is one of preventing the issue from coming up, and this can be done only by the railroads making a better showing in the next few months with the physical facilities they have.

In such a crisis there is no excuse for modesty on the part of the shippers who can give helpful suggestions. Their duty to themselves and the public is to speak out.

The Coal Trade Journal promises the aid of its industry:

The coal trade, from selfish motives if no others, will want to do all that it can to foster this program. It is, of course, directly concerned with average movement and with the percentage of bad-order cars, which is greater in open-top equipment than in other classes. The speeding-up process in general traffic must inevitably tend to reduce the congestion and the delays that are blocking coal as well as other commodities. Every improvement made in the general situation must be reflected in the coal situation. Heavier loading, faster mileage means more engines and train crews available for coal handling. When the song of the rails rings clear there are no sour notes in the coal refrain.

The Dry Goods Economist sees no argument for government ownership in the situation:

President Willard said that of the cars which are in use today thousands are really unfit to perform the service for which they were designed.

This condition is a strong argument against applying to the railroads government control or management as it exists in these days. It is interesting to speculate as to what would be the condition of the railroads if they had remained in the hands of the government for, say, five years, instead of a little over two years.

Packages sees the need of a return to war-time conditions:

The railroad situation is indeed alarming and grows more aggravating each week. Shippers are in a dilemma and at a loss to know how or where to seek relief. What is the solution? It is clearly apparent the railroads must have government aid. It is the opinion of experts in railroad matters that the war-time measure of unified operation must be adopted. In 1915 under separate, private operation the freight tonnage was 277,000,000,000, while in 1918 under unified operation and practically the same equipment under government control the tonnage was 403,000,000,000.

There is little hope in the situation for the *Manufacturers' Record*:

If every locomotive and car building plant in America were run to its full capacity not enough locomotives and cars could be built in two years to meet the present pressing needs of our railroads. . . . We are desperately short of transportation. Every day's delay intensifies the situation. Even to approximate the aggregate loss already made we must learn to think in terms of billions and unless a change is made very rapidly our thinking must run into many billions.

Let every shipper help, says *The Southern Lumberman*:

Every individual shipper, however, can do his mite toward speeding cars on their way loaded as heavily as is practicable. The little sawmill in the swamps of Louisiana, furniture manufacturer in Grand Rapids, the packing house in Chicago, all can contribute their help in this way. And if there is not an improvement in service, brought about through this or some other means, things are

mighty likely to be in a bad way before very many months have passed.

The West Coast Lumberman makes this definite suggestion:

If arrangements could be made with the railroads for assembling solid trainloads of lumber for shipment to the transfer, or Chicago, or the southwest or east of Chicago and these trains placed in charge of capable men to go through with the lumber to destination, much might be accomplished.

The West Coast Lumberman believes that a service of this kind is possible and urges the industry to at least look into the proposal.

The secretary of the National Association of Ice Industries has been car-hunting in Washington and not long ago wrote as follows to his paper, *The Ice Industry*:

In the rate hearing now going on the buck is passed so rapidly that I cannot follow it. The shell game is child's play in comparison. But I do know that we are in for a long season of disappointment and serious loss by reason of poor transportation facilities. Refrigerator cars are out of the question unless our people can bribe some local agent. These people here act as if they had never seen or heard of one.

Railroad Labor's B'll in, and Now It Must Be Paid

THE award of the Railroad Labor Board granting an increase of \$600,000,000 a year to the men is taken philosophically by the industries most affected. *The Railway Age*, after pointing out that in many cases the principle had been adopted of making larger percentages of increase to the lower paid employees than to those higher paid, says:

As to the public, it probably will think and be justified in thinking that on the whole the advances in wages which have been made during the last six years impose upon it as heavy a burden as it ought to be asked to bear. The average increase in wages has exceeded the average increase in the cost of living. Undoubtedly a large majority of the people of the country have not had during this time as large increases in their income as in their cost of living. The public is likely to conclude that the total advances in the wages of railroad employees have been sufficient, and that any bad conditions that have been created by mistakes which have been made in fixing the relations between the wages of different classes of employees should be corrected merely by changing these relations.

Speaking for its industry, the *American Lumberman* says:

Lumber will have to stand its full share in the inevitable advance which will be granted by the Interstate Commerce Commission. How large, or in what shape this advance will come, time alone will tell, but the consensus is that the total general advance covering all commodities will be between 25 and 33 per cent.

Preference to the manufacturer of car material

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and priority in its shipment will do much to help restore to active service many freight cars now unfit for use until repaired. Also the sooner material can be got to the car builders the sooner new equipment will be available. Lumbermen should, whenever possible, give priority to the production of car material and the railroads should give preference to its shipment. The sooner the railroads are functioning better the sooner it will be possible for retail lumbermen to secure any quantity needed of lumber and other building material so that the housing shortage, which is steadily growing more acute may be relieved.

The National Stockman and Farmer believes that the farmers "must ultimately pay our share of the bill," but recognizes as the best policy one which would permit

such rates and charges as would enable the railroads to keep abreast of the country's development rather than restrict that development by lack of transportation. For we must remember that if rates can be revised upward they can also be revised downward whenever it is found that they are beyond the legitimate needs for equipment and development. With our people's disposition toward such things what it is and will be, there is no danger of omitting any such downward revision whenever it can be made.

What the effect on prices would be is uncertain, the *Dry Goods Economist* says:

It may be urged that increased freight rates will mean increased cost of commodities. That such will be the case, however, is far from certain. Good authorities declare that the removal of delays in transportation of raw materials and of finished products, of food, of fuel, etc., will in itself tend to lower prices, because of lowering the cost of production. But even if the cost is raised, most of us would prefer to pay the price and enjoy the necessities of life in due quantity rather than go cold or hungry, as we are warned that we may have to do this coming winter if food and fuel cannot be transported.

The American Metal Market is hopeful:

The reasonable presumption is that the awards will be accepted and will stand for some time, also that railway labor will be more efficient and willing than it has been of late, and that, with greater enthusiasm, intelligence and cooperation on the part of railway officials should do much towards pulling rail transportation out of its present sad plight.

The Iron Age has this to say of the effect of the rate increases:

It will not be easy to trace the effect of the freight rate advance upon the steel market or upon other markets, for the reason that other influences are now at work tending to lower the prices of important commodities. In flour, in textiles, in leather, rubber and building materials the readjustment is under way and there is little question of its extension to other lines.

Iron and steel, being subject to a number of influences of their own, have been exempt thus far apparently from the tendencies plainly observed in other fields. Their failure to function as the barometer forecasting the revision of prices now in process in other lines of trade has been a matter of general comment. Under such circumstances the effect of the advance in freight rates on iron and steel prices would have less than ordinary interest for other trades. Moreover, it could have little present significance, for the steel trade itself, seeing that the prices of the Steel Corporation and those of most of the independent steel companies are from \$10 to \$30 per ton apart, a variance about ten times as great as the range of increase in steel making costs due to the new freight rates.

The Crockery and Glass Journal is cheerful:

While it is admittedly an evil, particularly at a time when each advance of any kind elicits a groan and a further tightening of the public's purse strings, it is nevertheless an obvious necessity. And it is to be hoped that, paradoxical as it may seem, this latest national boost may not only sound the death knell of others, but actually cause the decrease in the present cost of commodities through more efficient handling of the same.

The American Contractor, which sees the burden borne by heavy bulk freights, is gloomy:

The construction industry at this time can not stand a 35 per cent increase in freight rates and it will be suicidal to the industry and, in the long run, decidedly hurtful to the railroads if any such increase is added to the present rates on building materials—rates which, when compared with other commodities, are decidedly unfair and contrary to the general welfare of a nation which is suffering from a shortage of structural facilities.

The Lumber World Journal knows the answer to one question:

Who pays the freight? We will answer that. The consumer pays the freight. Well, then, if the consumer pays the freight, and the freight rates have got to be raised to take care of these wage advances and all the other expenses connected with the railways—and inasmuch as that is already settled by the existing law which demands that about a 30 per cent raise shall go into effect on or before September 1—and this raising of the freights ONLY is to be the answer, why not shake the bottle, take out the cork, and take a dose of the medicine?

In the opinion of *Credit*, increased freight rates are the first needed step towards saner business. The paper says:

It is announced that the large steel mills are contemplating a temporary shut down because they cannot get cars to move the steel ordered and already manufactured.

When it is remembered that a like situation exists in other fields, it becomes clear, first, that the increase should be granted at once; and, second, that this expenditure will do more than any one thing to relieve general congestion and increase prosperity. It will pay dividends in every direction.

You're Choking Us to Death the Cry of Construction Men

THE Interstate Commerce Commission's orders giving priorities to coal on open-top cars stirs sharp comment. "A brutal solution" is the phrase of *Manufacturers Record*, which goes on:

It is worse than brutal, because it means the embracing of a wholly un-American policy of preferential treatment. It encourages the coal industry to be negligent, because it becomes profitable to the coal industry to have a crisis arise, and it has been taught to believe that the greater the crisis the more sure it can be of favored treatment, even if the whole transportation machinery of the nation has to be commandeered for its use.

The Southern Lumberman is equally bitter:

The Interstate Commerce Commission probably has no reason for wanting to destroy the lumber industry, but if it should have any such object in mind it could not adopt any swifter or surer means of accomplishing that purpose than the paralyzing order governing the movement of open-top cars which it issued last week. Unless the order is modified in its application there will be a wholesale shutting down of sawmills in the immediate future.

It is a serious thing to charge that any branch of the great federal government is deliberately and in cold blood attempting to cripple any branch of the nation's business; but that is exactly the charge that is being made by those who are interested in the construction industries.

"Strangling construction" *The American Contractor* calls it and adds:

The bare fact of the case is that the coal industry is sucking the life out of the construction industry by virtue of absorbing cars. It can not be gainsaid that it is extremely important that fuel should be distributed. But it is equally important that materials to produce shelter should also be distributed. Now, is it necessary that one industry should give up all to the other industry? Or is there a chance for both if things are managed right?

Who Shall Be Blamed When a Mill Shuts Down?

OF VENERABLE platitudes, not least venerable is that: "Well—a lot depends on the point of view." Here are two points of view on the action of the textile mills in closing down:

The Textile World Journal:

Curtailment of production forced by cancellation of orders, and at present most acute among the worsted mills of Lawrence, Mass., and the cotton yarn mills of Gastonia, N. C., is becoming sufficiently protracted to cause apprehension among textile operatives generally, and to bring visions of soup kitchens and bread lines to those directly affected. The mayor of Lawrence has called a special meeting of the aldermen to consider the latter contingency. He and certain radical labor leaders suggest that the mills could well afford to run at a loss for a time to prevent suffering among the employees. Labor radicals would have it appear that there is something sinister in this curtailment movement, something aimed at the morale of labor organizations and having a political motive as well.

Mayor White, of Lawrence, thinks it strange that the shut down should have come so soon after the recent general advance of 15 per cent in New England textile wages; an advance piled on top of previous advances ranging from 165 to 200 per cent; yet neither he nor the radical labor leaders, nor the operatives have had the common sense to suggest the abrogation of the last advance, and a possible further cut in wages as a partial solution of the curtailment problem.

If the radicals who criticize manufacturers for closing their mills, and who are still mumbling about former profiteering, do not believe this let them try to obtain orders that will run the mill at a profit, or the money that will allow them to be run at cost or at a loss.

If it is really continuous employment that idle textile operatives are craving they can have it if they are willing to make a sufficient sacrifice in the wage rate. There is always some basis of cost at which manufacturers would be willing to indulge in the speculative accumulation of staple goods, but the basis today would be far below the present exorbitant wage rate.

The Iowa Homestead under the heading "The American Woolen Company goes on strike":

If labor has not the right to strike, neither has the farmer nor the capitalist. The capitalists strike whenever they secretly agree to limit production or advance prices, and also when individual concerns shut down factories and throw employees out of work. Such a strike has recently been begun by the American Woolen Company. By closing its mills, the American Woolen Company has deprived 40,000 persons of work and limited the supply of woolen cloth, which last will tend to keep clothing up to the present high and unjust level. To my way of thinking, the strike of this concern is far less justifiable than the strike of the coal miners and the railroad workers for wages that will enable them to meet the high cost of living, or the strike of organized farmers for fair prices for milk or sugar beets.

More Cotton Mills Here and More Spindles Abroad

THE FIRST HALF of 1920 saw an activity in textile mill construction which "has seldom been exceeded," says the *Textile World Journal*, the north and south about dividing the 750,000 new spindles which have been added in the cotton industry alone. The outlook for the last half of the year is not so encouraging, says the same authority, which explains:

In view of the temporary slowing down in general business conditions which has affected the textile industry, as well as most others, it is hardly to be expected that the record of the first six months will be approached during the last six months of the year; although our news columns continue to report new projects and those manufacturers who have

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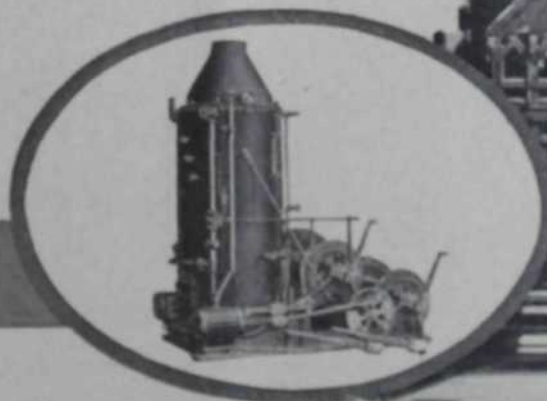
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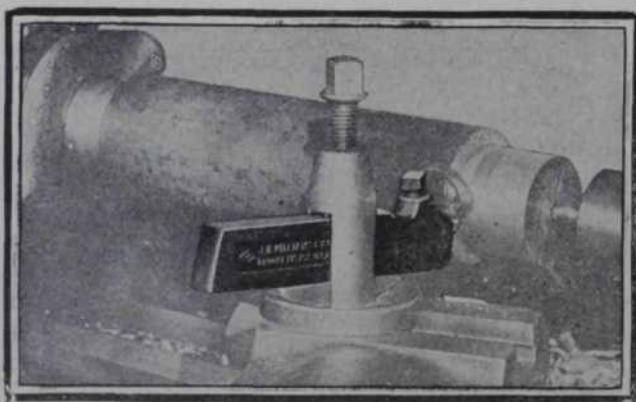
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postponed it on account of the high cost of building, will doubtless be ready to take advantage of more favorable opportunities if the trend of building costs shows a marked decrease and the financial situation is more favorable.

If there is hope in this for the American cotton grower, what of the demand from Europe. *Cotton and Oil News* recently said:

Jack Blackwell has just returned to New York from a three months' stay in Europe, where he gave special study to cotton mill conditions, and he reports that 95 per cent of all mills in western Europe will be in operation by September 1, and all of them by January 1. What does this mean? It means an unusually heavy demand for all grades of American cotton.

The *Progressive Farmer* seizes upon this and some figures of the number of spindles which are working or will be working in continental Europe and has a vision of cotton 25 per cent higher. It says:

These figures, based on reports from February 1 to June 1 of this year, indicate a very rapid recovery from the effects of war in nearly all countries except Austria and Poland, and go far to back up the opinion of Mr. Blackwell. If we have a low acre yield of cotton this year, together with such an increased European demand as now seems probable, cotton might indeed go 25 per cent higher, Mr. Blackwell suggests.

European manufacturers are not going to see higher cotton without a fight, however. At their June meeting in Zurich there was discussed but not acted upon a plan for the appointment of a committee whose purpose would be that "when cotton fell in price, for example, to 15d per pound, the committee would go into the market and buy up 1,000,000 bales, and then, when cotton rose to 24d per pound, the committee would begin to unload its million bales on the market."

The *Manufacturers Record* takes up the cudgels for the cotton farmer and says:

Business intelligence, ordinary common sense and the ethics of common morality would seem to point to the danger that the south will cease to raise cotton entirely unless the spinners of the world cease their fight to break down the price, a spirit typified in the oft-expressed desire to create a great stock of cotton with which to beat down the price whenever it advances above what they want to pay, and that is a scheme which has been in the minds of foreign buyers since 1904, and was reiterated at the Zurich conference a few weeks ago.

The Danger in the Shipping Bill and a Threat from England

ALL IS NOT smooth sailing for the Jones bill, now known officially as the Merchant Marine Act, 1920. Soon after its passage the *Nautical Gazette* of New York pointed out its dangers and described as its "most objectionable clause" the one directing the President to denounce all treaties forbidding the United States from levying discriminating tonnage duties on foreign ships or imposing discriminatory duties on goods brought into this country in vessels flying alien flags.

The *Gazette* added:

Our new shipping legislation promises therefore to embroil us with the other leading maritime powers and may induce them to act in concert against us so as to bring about its modification or repeal. This would be a very unfortunate outcome, for we can only hope to bid successfully for a large share of the world's carrying trade by securing the good-will and not the enmity of the great trading countries. To pass an act arousing their antagonism and one which violates existing treaties is not the way to further the interests of our merchant marine.

An echo comes from the *Fairplay*, a London journal of the shipping trade, which says:



STEEL SERVICE

Steel is born in movement. Molten, it streams from the furnaces a cascade of flame. Then the growling rollers crush the color from it, and it emerges cold and hard and gray.

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We, in our egotism or for other good cause, grant a foreign ship all the advantages which a British steamer receives, and more often than not we are snubbed for our pains. It is about time that our Government took steps to insist that our ships should have the same advantages as those of other nations, and that if, let us say, an American steamer receives certain privileges in an American port to our detriment, we, on condition that we do not retaliate in kind, should be put on a par with her.

Business Faces Problem of Urging on the Buyer

STIMULATION of buying is a problem that engages some lives of industry. The *Textile World Journal* cites delayed payments and stock protection as methods in use. It adds:

The above are simply illustrations of the extremities to which sellers have been forced to go and it is not certain by any means that what they have done or will do will accomplish the desired result of arousing the buyer from his lethargy. This accomplishment could best be made by giving the latter positive assurance that prices were to go no lower and that he was on the ground floor of the market and in a favorable condition to compete with others in the same line. This it is impossible to do and as a consequence a good deal may be heard within the next few weeks or more regarding unusual and perhaps uncommercial methods of conducting business.

Use the freight situation, says the *American Furniture Manufacturer*:

This should mean something to every furniture manufacturer. He should use the true condition of the railroads and the true statement of the peak load being yet to come, this fall, as an argument for the immediate placing of orders. The manufacturer's salesmen should talk a freight tie-up for the fall, because, unpleasant topic though it is, it must be faced and the salesman will do himself and his house, to say nothing of his customer, a real favor by urging that orders be placed now for immediate shipment to avoid the congestion on the railroads this fall.

Farm Implement News, which does not look for reductions, wants an early fixing of prices:

We hope it will be possible for manufacturers to determine next year's prices at a much earlier date than usual and thus give dealers an opportunity to place early orders with early shipping dates. To avoid a repetition of conditions such as have existed this year, it is necessary that the movement of spring goods be extended over a longer period than customary. This plan may make it possible to prevent spotted shortages due to transportation difficulties. Shipments of spring goods must begin in the fall and go forward as rapidly as cars can be obtained. Of course those dealers who are willing to buy early must receive assurance that the prices they pay will be stable. The speculative element must not be permitted to enter.

"Let's Wait Awhile" Talk by Farmers and Millers

THE REOPENING of the Chicago wheat market has stirred farmers and millers to guesses as to the future course of prices and the advisability of selling or holding. The *Price Current Grain Reporter* which has been advising the farmers "to hold their grain back as long as they conveniently can in order to relieve the strain on credit" has this to say of the first few days' trading in Chicago:

There has been business enough transacted from day to day since July 15 to establish a competitive market for American wheat, of which the farmers in all parts of the country will reap the benefit. Country buyers and millers are for the present tied up by transportation and tight money and buying of new wheat must necessarily be slow for a time, but the fact that a new market price has been made is a thing to be thankful for.

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DEPARTMENT OF COLONIZATION AND DEVELOPMENT

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Wallace's Farmer also advises:

So far as possible our surplus grain ought to be held back on the farm, even though we should be able to get a more liberal supply of grain cars. Financial interests naturally are very urgent in getting cars in which to move this grain; but it must be very evident that a liberal movement of grain will have a pronounced bear influence on prices. The man who has his surplus safe in stack or in bin and crib on his own farm ought to be able to hold through a low price area.

The *Modern Miller* brings "in the inevitable" "if" of transportation and goes on:

A minimum of 480,000,000 bushels is outlined as the import requirements for Europe. This is against a pre-war requirement of as high as 640,000,000 bushels. Canada and the United States are credited with a combined surplus of 320,000,000 bushels, which will be revised downward. Where will Europe turn for the remaining supplies? India needs food, but will spare some. The Argentine will be out of surplus in September and Australia is no promising exporter. Russia is a myth. With such a situation abroad and the trend of our crops, and of the transportation conditions, the waiting flour buyer has not the best betting hopes for the big price slump he expects.

A radical view is taken by *The Prairie Farmer*, which, under the heading "The Board of Trade See-Saw," says:

Corn prices dropped 6 cents on the Chicago Board of Trade last Wednesday. According to reports in the daily papers, "The Armour house was a free seller of corn, and was instrumental in starting prices downward."

Why should the Armour Grain Company break the corn market by selling imaginary corn for future delivery? Probably because it hoped to make money by forcing prices downward.

Isn't it about time to stop this horseplay and put grain marketing on a business basis?

Some Sharp Comment on the Interchurch Steel Report

SEVEN MONTHS after the collapse of the steel strike the Commission of Inquiry of the Interchurch World Movement has issued its report. Its nature can be gauged by these sentences in the letter submitting the report:

Taken as a whole, the commission's report constitutes a serious indictment of the labor policy of the steel corporation.

There can be no doubt that it will be regarded by the public as strongly favoring the laboring man's side of the case. The commission believes that such impression corresponds wholly with the facts it has discovered.

Of the report the *Iron Age* says:

It is hard to conceive how the churchmen responsible for this product of the Interchurch World Movement could think of it as aiding in the solution of the labor problem of the steel industry. Leaders of the industry admit that the eight-hour day is a goal to be attained and they are working toward that goal. Conditions during the war did not permit of a general shortening of working time; conditions since the war have been scarcely more favorable. But labor betterment at iron and steel works will go on, and even the ill-judged attempt of the Interchurch World Movement to deliver the industry into the hands of a labor-union autocracy will not stop, although it may retard, the movement to which earnest and progressive employers are devoting themselves.

The *American Metal Market*, which uses such phrases as "unalloyed ignorance" and "mere maliciousness," has this to say:

Just when the labor affairs were beginning to clear and labor was showing signs of sanity, this lopsided report has been dumped into the situation, and it is sure to be given greater weight than it deserves from those who do not stop to think of the ability, knowledge, means of getting information, and the prejudices of those who are responsible for the so-called investigation. The effect on radical labor is sure to be most unfortunate not only to all labor but to the public.

DURAND STEEL LOCKERS



THERE are some people still who consider steel lockers a luxury.

But it is safe to say that no manager of any progressive institution—be it of an industrial, quasi-public or social nature—considers steel lockers anything but a vital necessity.

And being of such importance, lockers should be of enduring quality—as Durand Steel Lockers are.

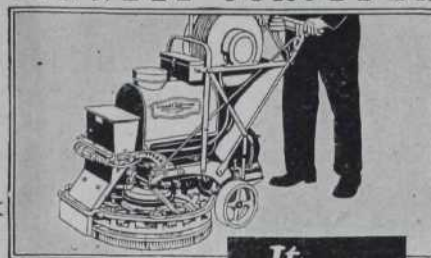
We make also Steel Racks, Bins and Shelving. Catalogues on request.

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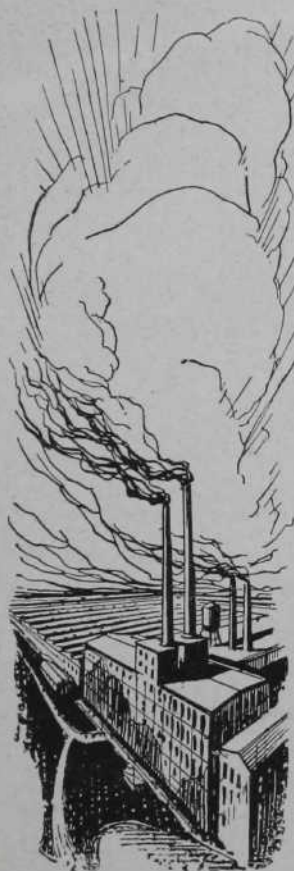


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in American Business



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Where CLEAN FLOORS are helping to produce a CLEAN product under CLEAN conditions.

Well-informed executives know that happy workers are profitable producers. They know, too, that CLEAN, pleasant environment helps to keep workers healthy and happy.

The U. S. Department of Labor, in Bulletin No. 249, says, "Cleanliness and good order contribute to increased output as well as to discipline and morale of the factory."

The Metropolitan Life Insurance Company, in a booklet, entitled, "The Health of the Worker," says, "The bad conditions that exist in factories . . . keep the worker uncomfortable, they hinder his work . . . They are likewise harmful

to the employer's interests, for he is a constant loser from poor and careless work, spoiled stock . . ."

Fortunately, executives are rapidly proving to themselves that cleanliness is essential to better production. They are learning that even the *floors* must be CLEAN—not just swept, mopped or hand-scrubbed with soda and water.

The Finnell System of Power Scrubbing, installed in a great variety of business institutions, is paving the way to greater efficiency by providing *really* CLEAN FLOORS.

For complete information, address inquiries to our Chicago offices.

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FINNELL SYSTEM

OF POWER SCRUBBING

A Twist of the Lion's Tail?

THE declaration for American independence in the matter of marine insurance, which Professor S. S. Huebner presented in *THE NATION'S BUSINESS* for April, met with an immediate response in the formation of the American Marine Insurance Syndicate under the provisions of the Marine Insurance Act.

No less prompt was the action of the London insurance interests. Cable dispatches from London announced that Lloyd would accept no more American business, giving as their reason according to the dispatches that the American shipping act was unfair. The State of New York had already passed an act directed against the "smuggling" of American insurance out of this country by foreign countries. There are those who think that the act of the New York Legislature had more effect in England than the shipping measure of Congress.

THE NATION'S BUSINESS has asked William H. McGee, of New York, a leading authority on marine insurance, for his views on the situation. They are as follows:

THE action taken by London underwriters in connection with business is either exaggerated in the public prints through a lack of understanding of the situation or else insurance brokers in this country, whose practice has been to place business in England first and America second or last; or insurance brokers of London who scent the loss of business to themselves have given out distorted reports of what has happened.

As I understand it the whole situation is a perfectly logical one. Partly as a result of investigation by the Congressional Committee on Merchant Marine and Fisheries and partly because of discoveries made independently by the Insurance Departments of New York and perhaps Massachusetts, the fact was brought to light that quite a number of the British companies admitted to do business in this country were deliberately writing over the heads of their American representatives, and while having all the rights, privileges and protection which their admission to this country gave them they were actually transacting American business elsewhere and were shirking some of the duties which went with the rights and privileges.

Upon the initiative of the Insurance Department itself and, so far as I know, without the slightest suggestion from any marine insurance companies, the superintendent of insurance of the State of New York introduced legislation which was intended to correct this and which requires that every foreign admitted company shall include in its United States statements the figures of any American business transacted outside of the United States, with the figures of the business transacted within the United States, and that the same reserves shall be made and the same tax paid upon both.

This requirement presented a problem to the home offices of foreign admitted companies for which they needed time to consider and to determine what course of action they should follow. It seems to mean that they may have to make large remittances to cover the reserves on business written abroad. Therefore, quite naturally and quite logically the British companies writing marine business admitted to do business in the United States came to the conclusion not to transact any American business in London for the time being—to stop until they clearly understood the situation confronting them.

There seems to be a lack of information as to how extensive was the agreement made in London and the companies that were parties to it, but there is little doubt from the tenor of the cablegrams despatched by various London brokers to their correspondents in this country that the English brokers have painted the picture as black as possible, possibly with the hope of creating a panic in this country.

As you probably are aware, each foreign company admitted to transact business in the state of New York is required to answer each year certain questions set forth in the annual statement blanks with respect to the transaction of American business at home office or elsewhere, and it is said that, with one

B



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Whenever you think of a card ledger, a stock record, a sales record—or any other kind of a card system—think of Library Bureau.

A thought for today:—Stop in the L. B. salesrooms and see a system of accounting which cuts posting time in half; gives you a daily balance in a few seconds; and is guaranteed to get statements out on time.

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Milwaukee, 420 Caswell block
Minneapolis, 425 Second avenue, South
New Orleans, 512 Camp street
Newark, N. J., 31 Clinton street
Pittsburgh, 637-639 Oliver bldg.
Portland, Me., 64 Masonic bldg.
Providence, 79 Westminster street
Richmond, 1223-24 Mutual bldg.
St. Louis, 801-15 Arcade bldg.
St. Paul, 131 Endicott arcade
Scranton, 408 Connell bldg.
Springfield, Mass., Whitney bldg.
Syracuse, 401-407 Gurney bldg.
Toledo, 625 Spitzer bldg.

Washington, 742 15th street, N.W.
Worcester, 527 State Mutual bldg.
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F. W. Wentworth,
San Francisco, 329 Market street
Seattle, 108 Cherry street
Oakland, 1444 San Pablo avenue
McKee & Wentworth,
Los Angeles, 440 Pacific Electric bldg.
Parker Bros.,
Dallas, 109 Field street
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Salt Lake City, 100 Atlas bldg.

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In the Heart of America The Tonawandas

1. The Chief Marine and Rail Gateway between the United States and Canada, and between The Great Lakes and The Atlantic.
2. Reliable, and cheap electric power from Niagara.
3. Superior labor supply, with open shop the rule.
4. Within 12 hours' ride of 70% of United States' and 80% of Canada's population.
5. Basic raw materials and diversified manufacturing within or close to the community.
6. Progressive living and working conditions; center of rich agricultural and fruit belt; equable climate.
7. The billions of financial resources of the Buffalo-Niagara Frontier District.

"Business strategy requires us to locate the factory in the midst of raw material sources, cheap and certain power supply, where satisfactory labor conditions are time-proven, where financing is ample, and where our markets are within arm's reach.

"Our raw materials and our finished goods can be delivered expeditiously and cheaply by water on the Great Lakes or New York State Barge Canal connecting Great Lakes with the seaboard, and by the national trunkline railroads touching The Tonawandas.

"Our sales efficiency will be greatly increased for we will be within overnight reach of most of our market—the giant part of America's buying power.

"We can get the greatest production at least cost from electric power generated at nearby Niagara.

"For years the labor conditions at The Tonawandas have been the best—stabilized by unusual housing, living, recreational, and educational advantages.

"Finally: Gentlemen, the financial resources of this section are measured by the billions.

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Traffic-Teeming Waters

TO the industrial and economic life of the world, the importance of the Great Lakes is incalculable. From the batteaux of the fur traders, the lake carriers have grown through many stages to the great freighters that bear in their holds the ores, timber and grain from the Northwest to the furnaces and the mills of the large centers.

A GREAT part of these cargoes is handled in the port of Chicago, and a large part of the financing necessary to facilitate this transportation is done in Chicago.

TO the financing and development of the traffic of the Great Lakes the Continental and Commercial Banks have contributed, as they have participated in financing many other lines of commerce and industry in the rich territory tributary to Chicago.

The CONTINENTAL *and* COMMERCIAL BANKS CHICAGO

Invested Capital More Than 50 Million Dollars

Resources More Than 500 Million Dollars

exception every British company has answered these questions with a statement that no American business had been transacted elsewhere than through American offices.

I am informed that the Insurance Department of the State of New York had in its possession specific evidence in direct conflict with the statements made by the British companies.

Possibly British companies not admitted to do business in the United States have joined with the companies who are admitted in the stoppage of writing American business but I should doubt it. I believe that so far as the companies are concerned the action taken was one that the situation obviously necessitated and one that was quite logical, but I believe that the English insurance brokers, scenting the loss to themselves of a considerable volume of business which had been going through their hands, have accordingly magnified the action taken by the underwriters.

That this may be so is suggested by the fact that quite a number of British insurance brokers have made a practice of traveling all over the United States soliciting business to be sent direct to them by merchants, brokers and agents located in the United States.

Our Fiction Becomes Fact

To the Editor:

YOUR "Stranger-than-Fiction Number" was rightly named. The editorial note preceding the text of the article dealing with "Transportation's Fourth Estate" invited attention to the probability of everything in the article being an accomplished fact "within five years."

Developments, since the editor wrote his note and since the "Stranger-than-Fiction Number" left the press, which involve the lighter-than-air industry of two continents indicate that in one year from date we may expect to see the east and west coasts of America tied by a number of airship lines such as those projected by the fictitious American Aerial Transport Corporation.

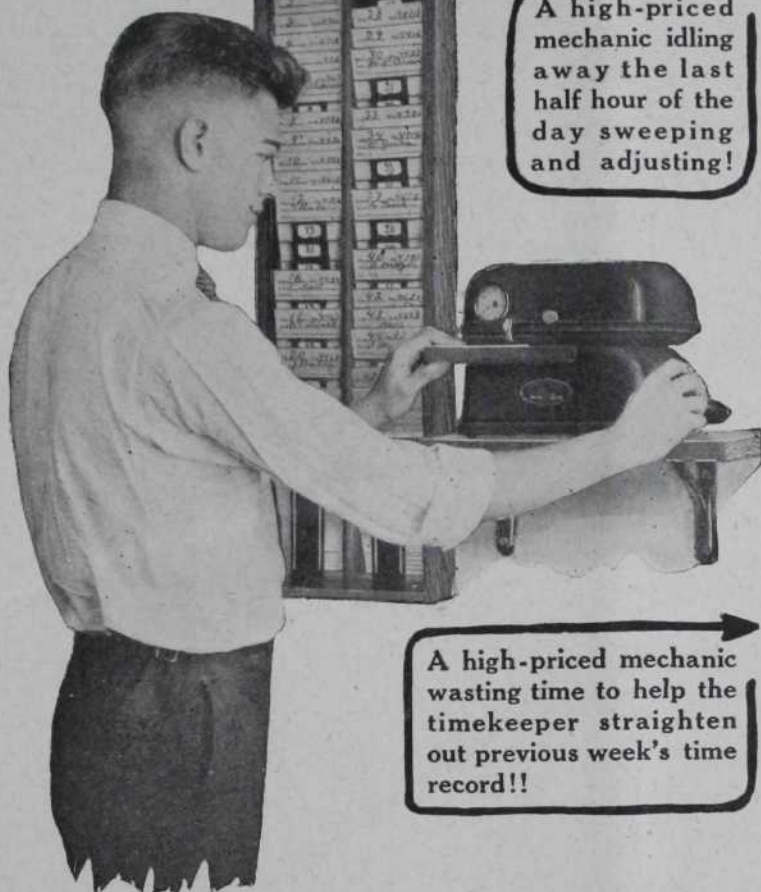
Last week a group of financiers of international prominence used the text of "Transportation's Fourth Estate" as a parliamentary form of procedure in organizing a corporation for the manufacture and operation of rigid airships for transcontinental lines in the United States.

One of the engineers of the projected corporation, so he told me, called at the editorial rooms of THE NATION'S BUSINESS and secured sufficient copies of the number in question to supply all the interested financiers, manufacturers and engineers who were present at the meeting, and the writer has been since informed that the general scheme of organization and the sources of supply for ships and materials coincide with those of the supposititious corporation, even going so far as to duplicate the air lines set forth in the article.

Further coincident items include the \$100,000,000 capital, the use of helium, the use of airplanes for feeder lines, the source of personnel, and the capacity of the airships themselves. All these details, the names of the officials, the financial interests concerned, and the story of the entire organization will appear in these columns at an early date.

In addition to the above corporation, other manufacturers and financiers, who have been waiting for the expiration of the limitations contained in the Versailles agreement prohibiting German aircraft activities until July 10, 1920, are now active in efforts to bring to this country German airships and manufacturing processes in order to establish American air transport lines for commercial purposes.

Henry Ford, having completed the reorganization of his various industries into one



A high-priced mechanic idling away the last half hour of the day sweeping and adjusting!

A high-priced mechanic wasting time to help the timekeeper straighten out previous week's time record!!

Observe what Stromberg Time Recorders brought to light the first week!

Observe also that they have furnished an accurate labor cost record, an accurate payroll record, an accurate division between productive and non-productive time, or between day-work and piece-work, and an accurate record of production per unit of time.

A high-priced mechanic waiting two-tenths of an hour for a job!!!

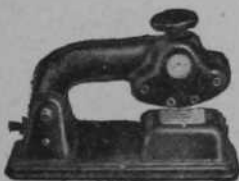
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Secondary Clock



Time Stamp



In-and-Out-Recorder



Programme Instrument

NON-PARTICIPATING		DEPT. 4	
G. R. <i>J. M. M.</i>	ORDER NO. 7011	EMP. NO. 186	
OPERATION SWEEPING	ADJUSTING		
MCH. No. <i>C</i>	PIECES	DESCRIPTION	
JUL 13 9 0			
JUL 13 8 5			
ACTUAL ELAPSED -5	TOTAL Pcs.	TIME ELAPSED	HOURS RAN
DAY WORK RATE 60	AMT. -30		

INDIRECT PREMIUM		DEPT. 4	
G. R. <i>J. M. M.</i>	ORDER NO.	EMP. NO. 186	
OPERATION 14	ROUND & BEVEL		
MCH. No. 507	PIECES	DESCRIPTION	
JUL 13 8 5			
JUL 13 3 6			
ACTUAL ELAPSED 4.9	TOTAL Pcs. 3217	TIME ELAPSED .0017	HOURS RAN 5.5
DAY WORK RATE 60	AMT. 30		

DELAYS		DEPT. 4	
G. R. <i>J. M. M.</i>	ORDER NO.	EMP. NO. 186	
Class of Work <i>Top 5</i>	REMARKS		
Mch. No. 576	To assist timekeeper in straightening out previous week's time record		
JUL 13 3 6			
JUL 13 3 4			
ACTUAL ELAPSED 0.2			
DAY WORK RATE 60	AMT. -12		

DIRECT PREMIUM		DEPT. 4	
G. R. <i>J. M. M.</i>	ORDER NO.	EMP. NO. 186	
OPERATION 5	TONGUE & GROOVE		
MCH. No. 515	PIECES	DESCRIPTION	
JUL 13 3 4			
JUL 13 0 2			
ACTUAL ELAPSED 3-2	TOTAL Pcs. 3000	TIME ELAPSED .0011	HOURS RAN 3.3
DAY WORK RATE 900	AMT. 60		

DELAYS		DEPT. 4	
G. R. <i>J. M. M.</i>	ORDER NO.	EMP. NO. 186	
Class of Work	REMARKS		
Mch. No.			
JUL 13 0 2			
JUL 13 0 0			
ACTUAL ELAPSED 0.2			
DAY WORK RATE 60	AMT. -12		



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GLOBE

corporation with \$100,000,000 capital, including the right to manufacture aircraft, has dispatched his engineer-in-chief, William B. Mayo, to Germany to study conditions pertaining to lighter-than-air, and to secure at least one ship with sufficient personnel accompanying to enable the Ford Company to undertake the manufacture of rigid dirigibles at Detroit, and a number of Detroit business men, headed by Col. Sydney D. Waldon, of Liberty Motor fame, stand ready to organize a transport company to operate the ships which the Ford Company may build.

Officials of the Zeppelin Company are still in this country and are active in endeavors to secure American capital to remove their concern from Germany to the United States, with the intention of manufacturing and operating Zeppelins in transcontinental and transoceanic trade. They have been in consultation with the Goodyear Tire & Rubber Company, the Submarine Boat Corporation, the L. W. F. Engineering Company (Inc.), the B. F. Goodrich Rubber Company, and others. Their negotiations, however, have not been successful because of their determined attitude with respect to the control of a combined German-American company remaining in the hands of the Zeppelin Company.

The Zeppelin Company has one prime card to play inasmuch as they own the two available airships now in Germany, the *Boden* and the *Nordstern*. Notwithstanding this advantage, it is not believed that they will find American financiers willing to invest funds in a German controlled corporation, hence it is a foregone conclusion that they will be obliged to sell outright the two ships now on hand and take a second fiddler's seat in any company with which they may ally themselves.

The writer, arriving at the office of one of the concerns above mentioned, found a conference in session attended by William E. Durr, Technical Director of the Zeppelin Luftschiffbau, who was discussing the conditions under which the German company would combine with the American concern, and each of the men in conference had before him a copy of *THE NATION'S BUSINESS* opened at the page headed "Transportation's Fourth Estate." The result of the meeting was disappointing to Dr. Durr, but the gentlemen present, including the learned doctor, did not hesitate to say that the only successful method of transcontinental air traffic must be organized and operated along the lines set forth in *THE NATION'S BUSINESS*, and that they were confident that such air-lines would be in operation by the end of 1921.

C. A. TINKER,

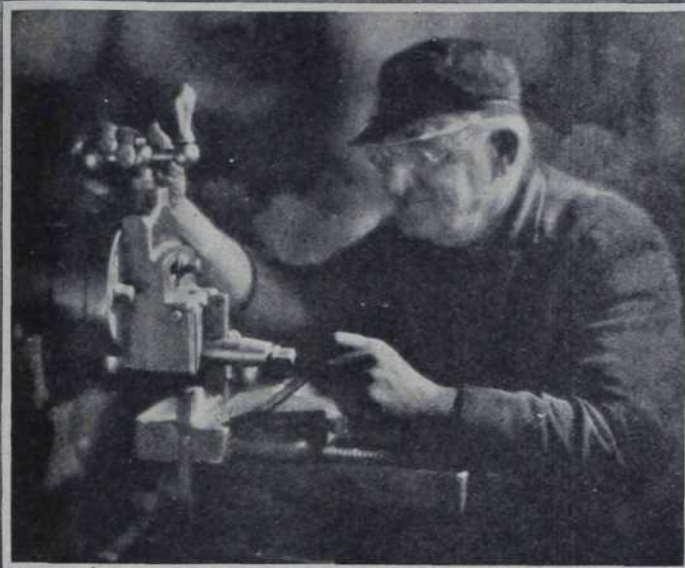
Lieut., U. S. Naval Reserve Flying Corps.

August 10, 1920.

Paying It All by One Check

ONE of the bothers of the banking business is the flood of small checks which banking institutions are forced to handle at a loss. A depositor may carry a fairly good bank balance, but at the same time write so many small checks that the cost of clearing them eats up the profit on his account.

Out in Indianapolis the banks and the apartment houses have worked out an arrangement whereby the tenant pays in one check with his apartment rent many of the things that ordinarily he would pay by separate check. Ice, newspapers, milk and such things are paid for direct to the landlord. The arrangement is said to work satisfactorily for all concerned.



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takes in his work is a vital factor in the tremendous earning power of New England industries.

The Preferred Stocks of these industries offer conservative investors an opportunity to share in the substantial earnings of these companies. These issues are strongly safeguarded and yield liberal returns.

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of the City of New York

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Capital - Surplus - Profits - \$25,000,000

With the Railroads

BUSINESS MEN have made up their minds that relief from the difficulties caused by freight congestion will come this year only to the extent that the railroads can handle traffic with the equipment now in use. Notwithstanding the increase in rates, the assistance given by the government under the provisions of the new transportation law, and the effort put forth by the carriers to obtain additional locomotives and cars, "rolling stock" in sufficient number to meet the demand will not leave the factories for several months. It takes time rather than the waving of a wand to construct locomotives and cars. Business men, therefore, are cooperating with the railroads to bring about the best service possible under existing conditions.

The action of the Interstate Commerce Commission in issuing priority orders for relieving the freight congestion was construed by those who favor government ownership to make it appear that the railroads had failed to function, and that it had become necessary for the government again to take charge. The fact is that the railroads availed themselves of the provisions of the new transportation law to have the Interstate Commerce Commission do things which they themselves were prohibited from doing. No railroad can issue a priority order without authority from the commission. In the absence of such authority, the railroads must furnish cars to patrons in the order for which they are requested. In the recent general congestion, which was greatly aggravated by the strike, the railroads turned to the law for the relief contemplated by Congress when the statute was enacted, as it was intended they should do. Notwithstanding the congestion, they have handled a steadily increasing volume of traffic. During the strike period, from March 27 to May 27, they handled 370,000 more cars than in the corresponding period of 1919.

In the rate hearing before the Interstate Commerce Commission, and in the discussion of the proposed increase in newspapers and in public addresses, the railroad representatives made it plain that they were not undertaking to say what commodities should bear the increase in rates, or what should have a decrease, or what should be undisturbed. They left that chore to the commission. The railroads confined their showing to their needs to meet the country's growing transportation demands, how long it would take to bring about the improvements expected, and what the cost would be. They assumed that the business interests generally favored an increase, and took no chance at getting at cross purposes with individual shippers by taking sides as between commodities.

G. H. Anderson, a Chicago traffic manager, has given out some interesting figures on the movement of freight on the Mississippi river from St. Louis to New Orleans and vice versa. From September 28 to December 31, 1918, there were shipped from St. Louis, 20,176 tons of grain, flour and merchandise, and from January 1 to October 4, 1919, 41,950 tons. On the down-stream shipments, 70 per cent were for export and 30 per cent domestic. Commodities received in St. Louis by river from January to October 21, 1919, were 1,522 tons of coffee and 1,278 tons of sugar, a total of 2,258 tons. Indications are

Lower Cost of Machining and Assembling Results From Change to Machine-Made Castings

THE fundamental weakness in the making of moulds by hand is a normal human weakness.

Immediately after heavy physical labor, the moulder must attempt operations which require 100% muscular control. Drawing the



FIG. 1. A moulding machine in action— $\frac{2}{3}$ of the machine lies below the foundry floor. The machine, by jolting, first rams the sand around the pattern. Then flask, sand and pattern are "rolled over" until the pattern can be raised mechanically by vertical draw from the sand.

pattern by hand and patching the mould by hand demand the most delicate muscular accuracy. The most skilled handwork varies sufficiently to leave a long trail of later expense in added cost for laying out, removing extra stock and often the scrapping of castings half-machined.

Contrast the familiar inaccuracies of hand-moulds with the graph (Fig. 2) of the operation of a power-operated moulding machine.

FIG. 2. This actual chart-reading shows the absolutely controlled accuracy of a moulding machine in operation.

Although foundries may appear to operate with rough-and-tumble freedom, nevertheless, since it is a basic process, crude, faulty foundry work is bitterly expensive later.

The modern moulding machine is not only built to the uniformity of action shown by the graph but also to maintain throughout its life an accuracy within .0005 inch variation per inch of pattern draw.

In practice, what are the results of this accuracy?

Fig 3 shows unretouched photographs of the same castings as produced by skilled hand work and from machine-made moulds. Even to the eye the hand-made casting at the left is clearly not true to shape. Necessarily uneven hand-ramming has allowed the sand to bulge in spots under gas-pressure and the resulting hills and hollows have not disappeared in the casting in spite of painstaking slicking and patching of the mould.



FIG. 3. The "reason why" is graphically presented in this comparison by camera of a hand-made casting (at left) and a machine-made casting (at right).

For the machine-made casting the sand was rammed to uniform density throughout. The pattern withdrawn by mechanical means, came away clean, requiring no slicking to smooth the surface of the mould and destroy the even porosity of the sand. This casting can

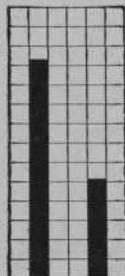


FIG. 4.

be exactly reproduced hour after hour, without enough variation to be detected by the camera.

Fig. 4 shows an average of comparative costs furnished by scores of machine shops and illustrates the surprising difference before and after the adoption of machine-made castings. This saving is due to four factors—

1. Less layout work before machining because each machine-made casting is exactly like each other casting from the same pattern.
2. Less stock to be cut away on machines because of closer limits maintainable under machine-moulding.
3. Fewer castings found defective after receiving partial machining.
4. More adequate and regular supply of castings from foundry.

In machine-shop practice certain very striking achievements have been made possible largely by the superior

production-qualities of machine-made castings.

In our automotive industries, lacking the advantage of foreign low-priced machine operators, rapid expansion would have probably been impossible had not the machine-made casting permitted standardization of machine operations and hence, wholesale economies reducing the initial cost of the car. Shops which, during the war, operated on hand-made castings for the 12-cylinder Liberty Engine, and later on machine-made castings, can testify forcefully to the increased speed in handling the latter through machining and assembling.

It is largely true that in all plants where large scale production is attained through standardized operations, machine-made castings

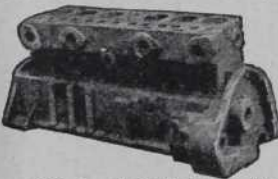


FIG. 5. A 6-cylinder en bloc automobile engine casting is practically impossible except by machine-casting.

are specified throughout. A few first-rank concerns still remain which have not yet recognized the savings thus attainable and are puzzled by the fact that smaller competitors hold their own in cost of production. The advantage can usually be traced to the machine-made castings in the smaller plant.

To neglect to investigate the machine-made casting is to make your competitor's path easier.

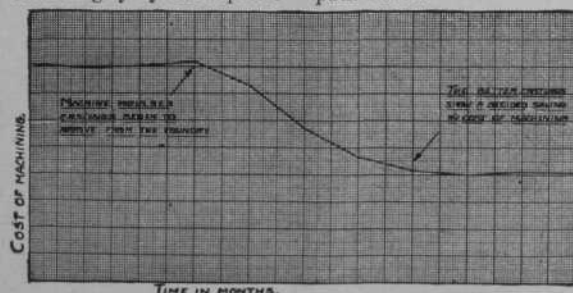
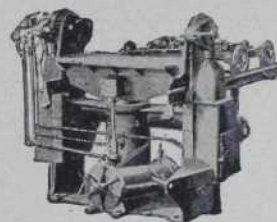


FIG. 6. Chart showing cost of machining and assembly before and after change to machine-made castings.

OSBORN MOULDING MACHINES

SOME picture of the world-wide acceptance of the machine-moulding process is indicated by the fact that the sales of Osborn Machines alone are today four times as great as the estimated total sales of all machines in the period preceding the World-War.

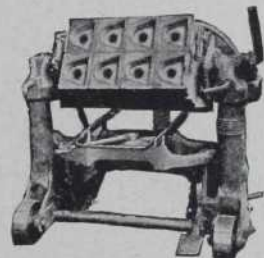
The functions of a moulding machine are three:—1. Ramming the sand by squeezing or



An Osborn Roll-Over Model

jolting; 2. Rolling the mould over; 3. Withdrawing the pattern mechanically from the sand without damage to either sand or casting.

In Osborn practice these operations are performed either by hand-power or by air-power. The greatest saving in labor is obviously secured by the latter



Hand-Operated Osborn Moulding Machine

but the saving in accuracy is attained by either method.

The choice and application of the proper equipment is a matter to which we give our closest attention. Let us send an experienced sales-engineer to study conditions in your foundry and make an authoritative recommendation.

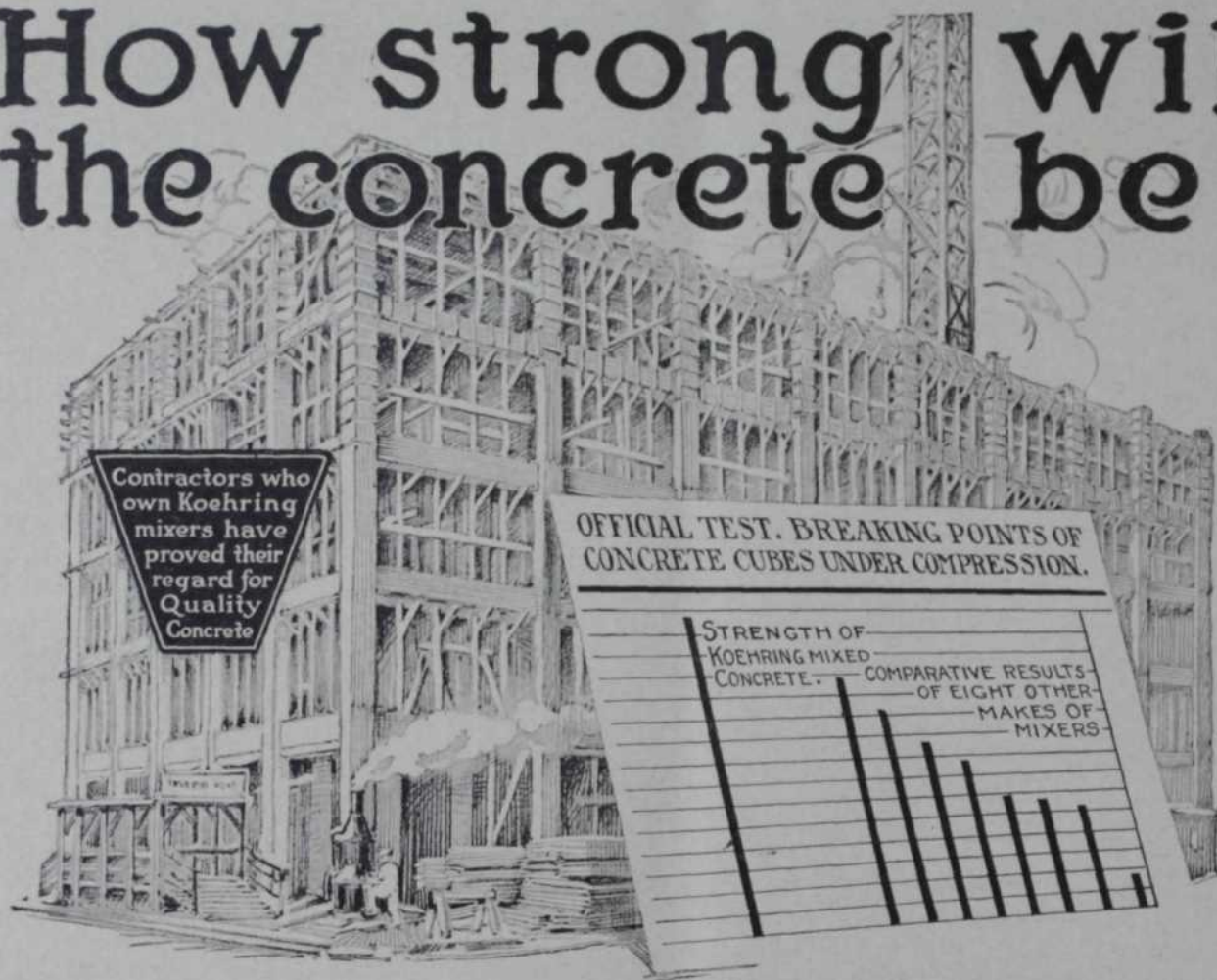
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How strong will the concrete be?



LOOK at the graphic chart above—the figures represent pounds per square inch necessary to crush small cubes of concrete—an official test of concrete as mixed by different makes of mixers, from the same materials, under the same conditions.

(1) Diagonal blades cut through the materials with churning action. (2) Blades carry material up with the motion of the drum, spilling part of material down against motion of the drum. (3) Material carried up by blades is hurled across diameter of the drum. (4) Materials now brought to discharge side of the drum are elevated to drum top and projected down on reversed discharge chute in a scattering, spraying action. (5) A spraying shower from the reversed discharge chute returns materials back again to the charging side of the drum for a repeated trip through mixing actions—the Koehring re-mixing action.



Concrete 31% stronger, or 31% weaker—that's the possible variation if you are indifferent as to what concrete mixer does your work.

Doesn't 31% stronger concrete justify you in departing from the strictly low bid basis of awarding your contract—in favoring the contractor whose concrete mixer has been selected, not on low price but on its ability to produce concrete of the dominant standard of strength?

It is the extra mixing action—the *re-mixing* action of Koehring concrete mixers—exclusive to the Koehring—which prevents segregation of aggregate according to size—which coats every grain of sand, every stone thoroughly with cement, and delivers concrete of the dominant standard of strength. Koehring mixed concrete is the strongest concrete.

If you want your concrete mixed according to highest engineering standards, favor the contractor who owns the Koehring Concrete Mixer. Write us for *Van Vleck's Book*—an exposition of standards and tests in concrete construction as approved by official engineering societies.

KOEHRING Concrete Mixers standardize concrete

KOEHRING MACHINE COMPANY, MILWAUKEE

that the 1920 traffic will be greater than that of 1919.

The Illinois supreme court recently decided that the public utilities act does not require a railroad to give a through bill of lading over an electric line with which it has no through rates or working arrangements, and no physical connection, other than by switching tracks of a terminal railroad association.

The Chuchow-Pinghsiang railway, one of the more important Chinese lines, has bought 20 standard American freight cars. Although the road was primarily built with American materials, subsequent purchases were from German sources.

Nearly all of the large American railroads are planning to reestablish agencies in Europe, most of which were discontinued at the outbreak of the war. London will be the main center for American transportation representatives. Agencies of some roads, however, will be maintained. Paris, Liverpool and Rome.

Portuguese East Africa has reached out its hand to the United States for the purchase of eight American locomotives, five of the Santa Fe type and three of the Pacific type. These will be used on the Lourenco Marques railroad.

Construction of the new Kansas and Oklahoma railroad, to connect Liberal, Kansas, and Forgan, Oklahoma, is nearing completion. This short link between transcontinental lines is expected to facilitate movement of wheat in that territory.

The Illinois Central announces that it has saved \$326,900 in five years in its campaign against water waste. Under the system adopted in 1915, all water bills are card indexed for comparison of costs and consumption.

The Character Element

To the Editor of *The Nation's Business*:

I have just been reading the August number of your splendid business magazine, and among its many interesting items I was especially attracted by your statement on page 5, with reference to the wonderful strides being made by Americans in scientific research. Your closing sentence, "Look out! or you won't recognize the world tomorrow," may be more prophetic than you realize. For it occurs to me that possibly, and probably, in our endeavors to develop the scientific and material phases of life we are overlooking the greatest asset of all in our civilization, an asset which is immeasurably more valuable than any scientific discovery, past or present.

I refer to the human element, *i. e.*, the character, the morals, the happiness of our country, for without these no nation or business can be enduring, no matter how scientific or wealthy it may be.

Truly, it would seem that with all the wonderful time-saving, labor-saving devices and great scientific discoveries in use today, we should be at the peak of civilization. But are we? This is an open question.

Science and wealth do not of themselves make a strong nation. Moral fiber must be the foundation of a great people, and it is to be hoped that in our efforts to build up big business and attain great wealth we shall not overlook the one element, *i. e.*, character, which must be developed to the end that we may enjoy the fruits of our labor.

As our country's business is dependent on the kind of foundation we lay, I felt it would not be amiss to write the foregoing.

Very truly yours,
JAY D. BACON,
2405 Swiss Avenue,
Dallas, Texas.

Italy Winning over Odds

By WILLIS H. BOOTH

Mr. Booth was a delegate of the American Banker's Association at the organization meeting of the International Chamber of Commerce. From Paris he went to Italy. What he saw there of Italy's forward fight in industry he here tells.

ITALY is at work as completely as any nation in Europe and more so than most of them. Her wealth in hydro-electric possibilities is being developed at a rapid rate. The current for industrial purposes, while absorbed as quickly as it is produced, is extremely cheap, and in a few years it will be abundant. The whole country is being interlaced with electric lines. The men engaged in this business are young, energetic and capable business men, highly representative of the new spirit that has possessed the industrial life of the country. The electrification of the Italian railways now proceeding involves 4,000 miles of additional trackage. The cost of the current is not so great a problem as the cost to the government of converting the necessary equipment, but the mileage already converted is considerable and the equipment is of a very high order.

Heretofore the port facilities in northern Italy have been largely restricted to Genoa, and these are now too small for the industrial position of the country. The task of providing greater facilities has therefore been undertaken and a new port is in process of development at Venice, about five miles from the old city, and so laid out that the new industrial area surrounding it will not mar the beauty or destroy the romance of Venice.

The problem of any industrial community, especially one with export ambitions, is the obtaining of raw materials and the efficient management of mass production. Italy is naturally bound to suffer some from the present world-demand for raw materials, but there is no evidence of immediate suffering. There is enough cotton in Genoa to keep the mills running for the next six months, pending the shipment of the new crop. This is equally true of supplies of silk, and, to a considerable extent, of coal. Owing to speculation in coal and poor facilities for handling it, the harbor at Genoa is now congested. The present supply is being gradually consumed, nevertheless, and new shipments must go forward in the fall. The need is not pressing at this hour. The pressure which Italy will have to bear will depend upon general business conditions throughout the world.

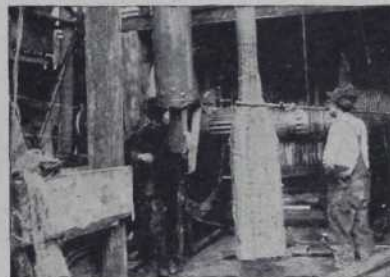
The matter of mass production has been approached by the new industrial generation intelligently. Its problems are appreciated and they are being worked out carefully. As instances of Italy's ability to manufacture on a large scale may be mentioned the Fiat motor concern at Turin, the Parelli rubber works at Milan and the Ansaldo steel plant at Genoa.

The same condition, with some slight differences, prevails in the field of banking and finance. Many financial institutions formerly controlled from Germany are now under control of Italians and they have found, inspiration in their efforts to promote indus-

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goes on constantly and
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Test Well for Oil in England



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In the Spotlight of National Business

IT is gratifying to think of the important part that National Blank Books and Loose Leaf Devices perform in National business. Wherever accounting is done and records are made, some items from the National Line are sure to be found rendering faithful service.

A user of one National number, readily becomes a regular customer of other National record books. It is much better for an office to stick to the National Line, in place of a motley assortment of varied makes and brands.

Among the important National items that should be used in every office are: Flexible Desk Blotter Pads, Ready Record L. L. Sheets, Ring Binders and Transfers, L. L. Memorandum Books and Full Bound Blank Books. "Nationals" can be obtained from almost any stationer.

Send for free copy of
"GOOD FORMS FOR BOOKKEEPERS"

NATIONAL BLANK BOOK COMPANY

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trial enterprises. Caution is necessary to keep their ambitions within control. So far they have been very helpful to the upbuilding of the industries of the country.

This growth of industrial enterprises, which is now assuming such an encouraging aspect, is going to necessitate a rapid increase in the areas under cultivation for food. It is questionable whether the intensiveness of cultivation could be increased, but projects for the reclamation of land along the rivers and adjacent to the sea are under way, and these forecast large increases in the corn and other cereal areas. Large enterprises of this character are being pushed forward, but others will have to be undertaken before Italy is able to supply her own foods, in season and out of season. There is encouragement in the fact that all the things necessary to establish productive capacity are being energetically and sanely provided.

The commercial problems of Italy are not different from those of other European countries. They will all be worked out when they are thoroughly understood. It was for the purpose of developing this understanding that the International Chamber of Commerce was brought into being. This body has already done some very effective and practical work. Its organization has been completed, and a building has been leased in Paris for its offices. All of the first class nations outside of the United States, Great Britain, France, Italy, and Belgium, which were the organizing nations, have been asked to cooperate.

It is hoped that the next annual meeting, which will be held in London next July, will bring together all the larger banking and commercial interests for a free discussion of the economic situation. From these discussions, practical and unofficial, it is hoped that a solution of the world's economic problems will be evolved. The proper flow of raw materials is one of the most practical ways of assuring permanent peace. Finally, it is hoped that a closer contact of the business men of the world will bring the commercial nations to a better understanding of each other.

For a Single Language

SOME months ago the Soviet government of Russia submitted the whole question of international auxiliary language to an official commission. After a thorough examination of various proposals the commission approved Esperanto as the best and it has been decided to use it in all the schools of the Russian Republic. Obligatory courses of study have already begun in Moscow, Petrograd, Tver, Orel and Smolensk.

For some time past the Republic of Brazil has favored Esperanto in its telegraphic and cable service by placing it on the same basis of charges as Portuguese, and is also introducing it in its courses of study in secondary schools.

For the first time in history the soldiers of Europe are forming international associations for education against war. A congress was recently held in Geneva and it was decided that, after October 1 of this year, Esperanto shall be the official and obligatory language of the correspondence and meetings of the federation. It was also decided to favor the use of Esperanto in international relations, such as postal and telegraphic service, commerce, science, etc.

The Chamber of Commerce of the State of New York, at its recent commercial examinations, gave the same value to Esperanto as to other languages, and a number of candidates passed the examination with success.



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"Our trucks now run on Goodyear Cord Tires—maintain much better schedules, both on concrete highways and mountain roads; to Sacramento, 50 miles, and, in the summer, to Lake Tahoe, 61 miles. Save gasoline, oil, repairs. One 2½-ton truck goes 7½ to 8 miles per gallon. A ¾-ton unit has traveled 45,000 miles with only trifling repairs. Pneumatics carry fragile loads we could not risk on solids. Goodyear Cord mileages average 11,000—an excellent record here."—F. H. Fitzlaff, Owner, El Dorado Transportation Company, Placerville, California

FROM scenes of vastly different activity, from frontier places and from populous centers, comes evidence like this, of the competence of Goodyear Cord Tires on trucks.

Lonely mountain trails and jammed business streets alike have found them increasing the usability of trucks and thereby increasing the earning power of units and fleets.

These active, pliant, gripping Goodyear Cord Tires do not yield to stubborn conditions of routes and weather but enable uninterrupted and punctual hauling despite them.

Their employment advances the working spirit of drivers, makes trucks easier to handle, protects mechanisms, loads and roads, and often cuts sizable sums off operating costs.

Made powerful by Goodyear Cord construction plus the care that protects our good name, these tires are conveniently available through Goodyear Truck Tire Service Stations everywhere.

Records collected from trade and industry, showing how pneumatics improve diversified hauling, are supplied on request by The Goodyear Tire & Rubber Company, Akron, Ohio, or Los Angeles, California.

GOODYEAR
CORD TIRES



DOWN IN BIRMINGHAM ALABAMA'

Down in Alabama they do more than build steel mills, pick cotton and hum lullabies. They conduct department stores of a high standard.

The Drennen Co., a typical sunny south concern, has served Birmingham people for over 53 years.

In 1903, the "Sperry" Service of co-operative discount was adopted because this company desired to show an extra consideration to cash customers. It was their choice because its record was known, its value had been convincingly demonstrated and its popularity with the people was nation wide.

Today, the little *S.H.* Green Trading Stamp is as well known to the folk of Alabama as the bay of Mobile, and the Drennen Co., aided by the "Sperry" Service, is paying a bona-fide discount, encouraging thrift and building goodwill and a big business in Birmingham.

THE SPERRY & HUTCHINSON CO.
114 FIFTH AVENUE NEW YORK

The Log of Organized Business

The National Chamber completes payment for the site of its new home—Other activities in the great field of business organization

FINAL PAYMENT has just been made on the Daniel Webster property, in Washington, upon which site the new home for the National Chamber of Commerce is to be erected. The site, which is ideally situated across Lafayette Square from the White House, was purchased for \$750,000.

Work on the building is to be begun as soon as the \$2,000,000 necessary for the project are paid in. Harry A. Wheeler, of Chicago, first president of the National Chamber, who is in charge of the building fund campaign, reports that business men in all sections of the country are responding enthusiastically. Many communities have already subscribed their allotments, while a number of cities have over-subscribed. The work of collecting in the subscriptions is being vigorously pushed by Mr. Wheeler, in order that the construction of the building may be undertaken at the earliest possible time.

The Best Local Members

EVERY TIME we make a good member of the National Chamber we make a better member of the local Chamber," declared Frederick J. Koster, former president of the San Francisco Chamber of Commerce, in addressing a dinner recently held in San Francisco, attended by representatives of all the Pacific coast cities. He added:

There is no question that the local Chamber, to a considerable degree, represents the best interests and civic sense of every community and that it not only furnishes leadership for the real progressive element of the community but at the same time it is a bulwark against dangerous radicalism. However, it is not enough that the intelligent progressive element of a community should establish such principles locally. These times of national crises the same substantial element of society must be organized for patriotic, intelligent action. The Chamber of Commerce of the United States represents nationally all that the local chamber stands for locally.

It is a truism that the larger a man's horizon is and his interests the more useful he is to the smaller group. In this case the man who is useful in the National Chamber will be that much more useful to the local Chamber.

Business Booms with Open Shop

SINCE the organization of the Dallas Open Shop Association by the Chamber of Commerce last fall, building construction has broken all records. Building permits granted by Dallas for the fiscal year ending May 1, 1920, totalled \$20,881,488, and the permits for the first half of 1920 are nearly \$10,000,000. When the open shop was organized \$8,000,000 worth of building construction was being tied up by labor troubles, but there has been no serious difficulty in this respect since last fall.

Teaching Business by Shop Work

THE Dallas, Texas, Chamber of Commerce, in cooperation with the Southern Methodist University, is assisting in the establishment of a school of commerce, finance and accounts in Dallas. The Chamber of Commerce has appointed an advisory committee consisting of representatives of the major business activities to assist the city in the development of the school. The Director of the Chamber of Commerce Industrial Efficiency Department will be acting director

of the new school. He has organized new courses so that students may supplement their class work with practical experience in Dallas business houses. These students will be paid for their services, thereby enabling business men to obtain capable employees for peak load periods and at the same time make it possible for students to earn all or part of their expenses.

Boasts of Largest Membership

ONE out of every ten persons in Alpena, Michigan, is a member of the Board of Commerce of that city. Recently the Alpena Board of Commerce conducted a membership drive handled entirely by local people. The drive lasted for five days in which time the membership was increased from 114 to over 1,400. The officers of the organization say that proportionately they have the largest membership in the United States.

Confederate Money in Germany

THE American Chamber of Commerce in Berlin has issued a warning urging Germans and all others to have American money carefully inspected by banks before accepting it, as a result of the fact that American confederate currency in large quantities has been discovered in Berlin and other parts of Germany. One German merchant is known to have given 28,000 German marks for a bundle of confederate bills.

Bringing Business to Los Angeles

THE Commercial Board of Los Angeles has created a new Industrial Department to furnish information to foreign capitalists regarding the opportunities for investment in Los Angeles along industrial lines, and also to home seekers.

Cincinnati Welcomes Farmers

WITH the idea of utilizing the facilities of the Chamber of Commerce in securing a broader and more comprehensive knowledge of agriculture, leading farmers in the vicinity of Cincinnati are making plans for affiliation with the Cincinnati Chamber of Commerce which promises to be productive of results to both the farmer and business man. The initial meeting to bring about these results was held recently. Visiting farmers of about fifty representative grange organizations in nearby counties were present and made known their approval of the preliminary plans for the proposed affiliation.

Junior Chamber Idea Spreads

HOW CAN a Junior Chamber of Commerce be organized? Frank G. Macumber, a former president of the Hartford Chamber of Commerce, offers some helpful suggestions for forming a Junior Chamber. He says:

I believe that a Junior Chamber is an invaluable adjunct to any Chamber of Commerce for the reason that it is a recruiting ground for the future senior members of the "trained" sort. Members of the Junior Chamber should be in attendance at the meetings of the senior body as observers but not as participants. The junior body should later consider and act upon the same identical problems as the senior body—not as influencing in any manner the senior body's decision but to give the junior boys experience and reaction along similar lines.

In addition the Junior body should have its own



A Council of War against waste

IN a fire box under a cold boiler it may seem a queer place for a salesman to be, until you get his viewpoint, which is first to sell an idea, the prevention of waste—the basic aim of the institution he represents. The materials he recommends are the tools by which he effects a saving—serves in conservation.

So he doesn't talk his line. He talks the other man's problems, proving as he speaks, that he knows his own materials in their relation to the other's need, whether to be involved in the more economical burning of coal, the reduction of heat losses, or the reduction of plant maintenance.

His business creed is helpfulness—an ideal, if you please, that makes the dingiest cranny in a plant as important as the mahogany office, and puts the grimy hands of the doer one notch above the kid-gloved ones of the talker.

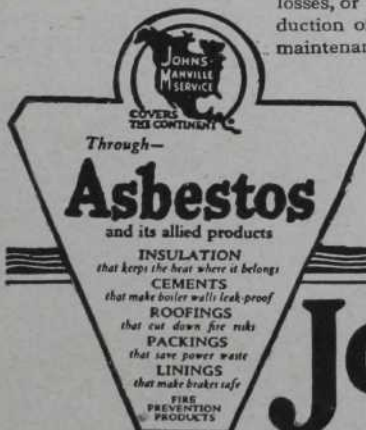
So you usually find the Johns-Manville Waste Killer right where the trouble is. He may be up on a roof deck, in a pump room or a machine shop, down a mine shaft or a boat hold.

But wherever he is, you'll find a Johns-Manville customer who has learned the value of the kind of service this Company offers through its men. This customer confidence is an asset we value above all else because our own men have built it.

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10 Factories—Branches in 64 Large Cities

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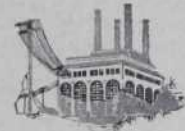
Building Materials

Johns-Manville Asbestos Built-Up Roofing
for flat roofs
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Brake Lining
Clutch Facings
Speedometers
Automotive Packing
Automotive Lighting Fuses
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Should an executive interest himself in goggles?

Bear in mind that goggles are not ordinary supplies. They are necessities for keeping up production and keeping down liability; and their selection is responsible work.

If your safety man tells you that your welders wear Willson Triangular Welding Goggles you can check up that your men's eyes are protected and comfortable.



You also can check up that your welding production has increased; and that the goggles are approved by the Underwriters' Laboratories and accepted by your insurance company. Are these facts worth knowing?

We invite correspondence regarding goggles and respirators.

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particular and specific activities—possibly of a cooperative character, as for instance, boy scouts, playgrounds, etc. In my judgment, the Junior Chamber movement is one that will assume great proportions in this country and Hartford should get in line.

Wins Fight Over Mail

THE Chamber of Commerce of Pittsburgh scored a distinct victory as the result of the United States Post Office Department taking positive steps toward the establishment of aerial mail routes between Pittsburgh and St. Louis, between New York and Chicago, via Pittsburgh. For more than a year the Pittsburgh Chamber of Commerce has been working for the establishment of a mail service by airplane between Pittsburgh and the larger centers of the east, the south, west and northwest.

Now Toledo Chamber of Commerce

IN ACCORDANCE with the wishes of the Chamber of Commerce of the United States, which is endeavoring to have all commercial organizations known by this one name, the Toledo Commerce Club, which was organized June 1, 1919, recently changed its name to the Chamber of Commerce. Hereafter all mail should be addressed to the Toledo Chamber of Commerce and all checks should be made payable to this name.

Another Junior Chamber

JUNIOR Chambers of Commerce are springing up all over the United States. The latest one organized is the Junior Board of Trade of Red Lion, Pennsylvania. This new organization of young men under thirty years of age is doing what it can to boost the town. Red Lion is principally a tobacco town in which there are approximately sixty cigar factories and twenty warehouses and packing establishments. The young members of the Board of Trade are boosting the town's products by putting a red sticker on envelopes which contains this inscription, "If it's a good smoke, it comes from Red Lion." This is only one of several helpful things the Junior Board members are doing to sell Red Lion products.

For Terminal Betterment

CONSTRUCTIVE recommendations looking to an improvement of railroad terminal service and in the handling of freight cars

will be made to the railways by the Railroad Committee of the Chamber of Commerce of the United States. These suggestions are under preparation now following a meeting of the Railroad Committee, of which George A. Post is chairman.

Richard Waterman, secretary of the committee, has just completed an extensive investigation of terminal facilities and terminal management in some of the principal cities of the country. The recommendations of the committee will be based largely on his report.

Building a Chamber of Commerce

IT IS WELL to begin a textbook with a definition of the subject treated, and William George Bruce, who has edited a new volume on "Commercial Organizations" (The Bruce Publishing Company), thus defines the American Chamber of Commerce: "A voluntary organization of business men approaching the problems of the community from the business angle."

It is the community idea which has differentiated American business bodies from their brothers in Europe. Random selections from the chapter headings show how deeply this idea is imbedded in our system: "The Relations between Civics and Commerce," "Industrial Survey of the City," "City Publicity," "Charity Endorsements."

Mr. Bruce's book, which is the work of some thirty or forty contributors, is divided into three parts: The Essentials of Efficiency and Characteristic Activities, Methods of Organizations and Operation, and Qualifications and Self-Training of Secretaries.

Very practical are such chapters as Major Eva's "When to Hold and How to Conduct Meetings," and those devoted to records and accounting systems. Harder than the problems of getting members in is the problem of keeping them in and keeping them interested, and valuable sections are devoted to these topics.

Mr. Bruce writes the chapter on the "National Association of Commercial Organization Secretaries," of which he has been the president.

And if any question the possibility of a commercial organization secretary having a sense of humor, he is recommended to read the essay by Munson Havens on "How to Fail as a Secretary."

Keeping Out the Wildcat Stock

The Erie Board of Commerce is helping the small investor to guard his dollar by simply telling the truth about schemes offered him

By H. A. DAVIDSON

Managing Secretary of the Board of Commerce of Erie, Pa.

ERIE for years had been a field for wild stock selling, with an annual loss out of all proportion to the amount risked.

It was common for the employee to consult his employer, but it was just as common for the employer to realize his utter inability to give a satisfactory answer.

The Erie Board of Commerce decided to take a hand. The officers of the Board of Commerce studied the blue sky laws of other states and, after consultation with the mayor and city officials, developed a plan. They began by inviting to luncheon a large number of the employers of the city, members of the board. The necessity for a state blue sky law

was presented and the advisability of adopting some temporary means of relief shown.

Opposition immediately registered itself against any system of municipal supervision, but when it was shown that there was no protection for the people from the fraudulent schemes, it was decided that the Board of Commerce should take up itself the burden of examining into stock offerings of every nature.

Through newspaper publicity, correspondence and public addresses, the people of the city were told that the Board of Commerce would conduct a department for the examination of propositions for the sale of stock,

Westinghouse

ELECTRICAL APPARATUS FOR EVERY PURPOSE



Westinghouse-Equipped Electric Ovens are used at the plant of the Packard Motor Car Company, Detroit, for baking enameled metal parts.



Getting Better Heat without Fire

Follow the growth of the motor-car industry, and you'll find that methods, processes and machines have again and again been revolutionized by a single force—Electricity.

Today the span of improvement has widened to include an application of current as great as light and power—commercial electric heat.

Through this heat the motor-car manufacturer finds the most satisfactory solution to his problem of enameling metal parts.

Through the use of electric heat he

can be sure of an even temperature that bakes the enamel from the bottom, leaving it dense and free from blowholes.

Moreover, he minimizes fire risk and greatly reduces the time required for proper baking of enamel.

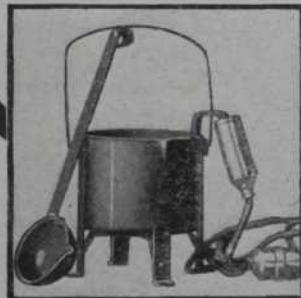
Electric heat is used today for a variety of commercial purposes in many branches of industry, but always retains its fundamental advantages of evenness, ease of regulation, cleanliness and safety.

The wide experience of Westinghouse industrial heating engineers is placed freely at your disposal.

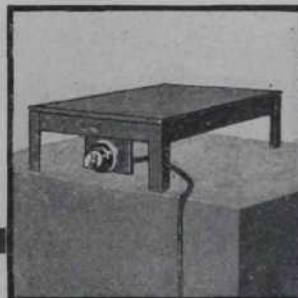
WESTINGHOUSE ELEC. & MANUFACTURING CO.



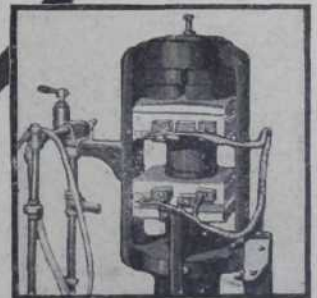
Electric Glue Pot keeps glue at proper heat



Electric Solder Pot combines safety with convenience



Hot Table used in making celluloid articles



Press for forming hot-molded compounds

The Shrinking Selling Price

How can a manufacturer make a profit when the consumer insists on lower prices?

By increasing production per man, per square foot of factory; by cutting out preventable wastes and by removing all obstacles to production and shipping.

A beginning is found in the ratio of what is to what ought to be—an every-day definition of efficiency.

You probably know your production figure—"what is." But do you know "what ought to be?"

A river flows more swiftly when obstructions are removed. Do your buildings hinder your workers? Do they prevent the prompt shipment of finished goods?

A building is a definite thing, not subject to human caprice. Begin your study here. If a building *does* hinder, if it keeps "what is" far below "what ought to be"—then you need a new one designed by architects-engineers who have had long experience in designing factory buildings and supervising construction.

Those selling prices are shrinking—rapidly—and the shrinkage comes first out of profits.

MONKS & JOHNSON ARCHITECTS • ENGINEERS

99 CHAUNCEY STREET
BOSTON

50 EAST 42ND STREET
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L. E. Knott,
Apparatus
Company



with the suggestion that no investment be considered until a report should be made. There were quick and indignant yelps of protest from salesmen and corporation representatives and demands to know the authority for such action. After explanation, houses of standing recognized that an investigation would be to their interest and fell in line, suggesting to prospects that the Board of Commerce be asked for information.

Others were not so prompt in asking for an examination, but as the people of the city became gradually convinced of the advantages of the service and began to ask the opinion of the Board of Commerce, the agents in self-defense were driven to the board.

How They Worked It

THE rules adopted were that complete selling literature should be supplied, that a statement of the financial condition of the house be delivered, and that the board have sufficient time to conduct its investigation as to financial standing, profit-making ability, personnel and such other requirements as any partner would have a right to know. It was explained to the salesman that no statement would be made for publication, that no opinion would be expressed unless the proposition was shown to be fraudulent or most undesirable, and that before any report would be made to a prospective buyer, the selling representative would be called into conference and allowed to see the findings. It was also explained that the board had no authority to prevent or restrict activities, but that, should it be asked for an examination, it would suggest that no investment be made until its report was prepared. It was agreed that the report should be open for inspection by anyone, the only facts not being available being those given to the board in confidence.

After the selling literature is received, immediate action is taken to procure the financial report, and, if possible, to obtain a statement of several years' business, in order that the profits or earning power may be ascertained. The personnel of the enterprise is carefully examined and a close study made of the proposition, particularly of its financial condition, in which the majority show their weakness.

Upon the conclusion of the research the salesman is invited to the office and is informed of the facts learned. He is then told that that is the report which will be made by the board and that he is at liberty to refer to it anyone asking for information. It has been the policy of the board to make no report over the telephone and to make no statement in writing other than those shown as facts through its examination. When inquiry is made at its own office, it is the custom to submit the facts with such explanation as will indicate whether a proposition has qualified as one of an established earning power, or whether it is still in the promotional or speculative stage, the inquirer being told that the purpose of the investigation is only to ascertain the facts and to give no advice or opinion.

The results of many examinations made since the first of the year have shown that rarely does the salesman know the condition of his company and that only in exceptional cases has he seen, or does he possess, an official financial statement of his corporation. He is taught the selling talk, gets the literature and is expected to make good, irrespective of the benefit or danger to the person who purchases the securities. In a few instances the salesman, upon being shown the condition of the company as learned by the Board of Commerce, has returned his portfolio and has refused to handle the securities further. In

still other cases men considering accepting positions as salesmen have asked for information and upon being shown the report have declined.

There have been propositions submitted in which it was necessary, owing to unsatisfactory standing and condition, to make an unfavorable report. In such cases the board has been visited by officials who have demanded the reasons for such statement and they have received precisely the same treatment granted inquirers, the facts being laid before them. In one such case the selling literature was recalled, and new forms were issued to cover the objectionable features.

Great care is taken by the board that its report contains nothing but facts. For every statement made, proof is in hand, and it is expressly stated to both the representative of the proposition and the proposed investor that the board will not recommend and will not advise, its purpose being to show that a proposition is speculative and promotional, if such be the case, or is upon an investment basis if a showing of earnings demonstrates that to be the fact.

The secretary of the Erie Board of Commerce has been asked many times by other secretaries the details of the plan adopted and also as to whether the risk involved to the board is not great. The answer has been that if such report is based upon actual findings and confines itself to these facts no risk is taken, but that unless the secretary has had the benefit of an experience in financial matters he would much better throw the responsibility of such investigation upon a committee of his directors.

No Cutting of Cotton Loans

FINANCING CROPS this autumn has been a subject of correspondence between the Department of Agriculture and the Federal Reserve Board, based on a rumor that the board had directed banks in the reserve system not to lend on cotton until it had been sold for prompt shipment. There were also some assertions that under the federal reserve system facilities for financing cotton had been lessened.

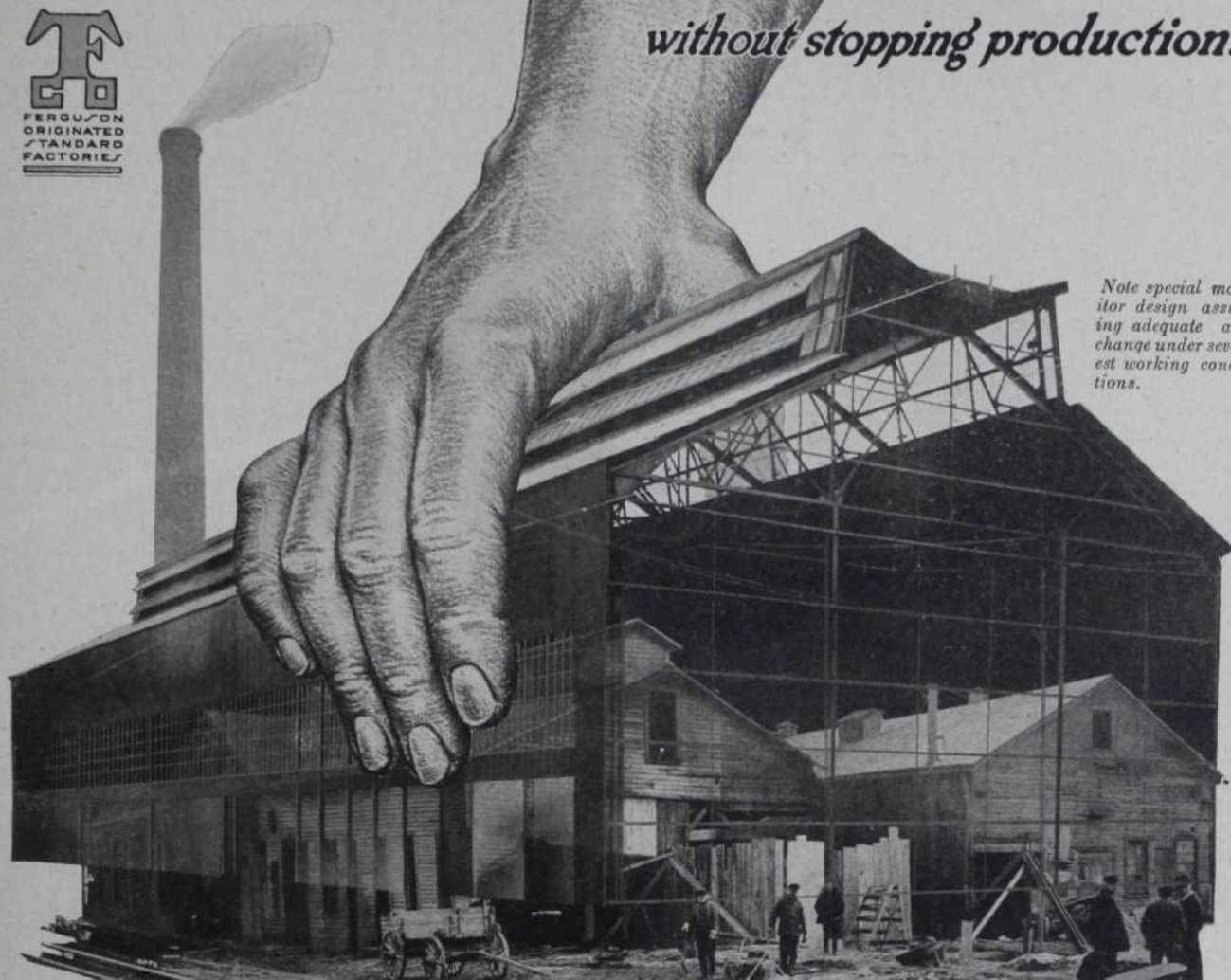
A general and sweeping denial is entered by the Reserve Board. It declares it has no power to require member banks to make or refuse any loans, and that banks in the cotton belt, unless over-loaned in other directions, can make larger loans on cotton than ever before.

The board points to the enactment of last October by which national banks may for six months in a year increase its loans to one customer from 10 per cent to 25 per cent of its capital and surplus, provided loans in excess of 10 per cent are secured by warehouse receipts for readily marketable staples. This amendment was advocated by the board that financing of crop movements may be facilitated.

The extent in which member banks that finance cotton or other crops will be able to obtain rediscounts at their reserve banks, the board says it cannot say. That is a matter which lies with the reserve banks, the directors of which are to administer the affairs of each reserve bank "fairly and impartially and without discrimination in favor or against any member bank," and "extend to each member bank such discounts, advancements and accommodations as may be safely and reasonably made with due regard for the claims and demands of other member banks." The board adds, however, that it feels confident reserve banks will do all that can reasonably be expected to aid in the crop marketing.

NEW BUILDINGS OVER OLD

without stopping production!



Note special monitor design assuring adequate air-change under severest working conditions.

The Ferguson Slogan—"a good job done on time"—holds in spite of all difficulties.

IN SIXTY DAYS—despite last winter's disorganized transportation and paralyzing weather, a new building, 60 x 200 feet, was erected over an overcrowded plant of The Western Drop Forge Co., Marion, Ind., without an hour's shut-down on production.

BUT Ferguson Standard Factories are not merely fastest in erection. In permanence, in the vital factors of day-lighting and ventilation, in usable floor space and in every detail of engineering they combine the selected best features gained in designing 15,000,000 square feet of industrial floor space.

The day you decide on the type and size of your

new building or plant, prefabricated steel and other material can start to the site, experienced erectors will meet it on the job and you will occupy your new floor space while your slower-acting competitor is still thinking it over.

A long list of leader-corporations look to Ferguson, *without competition* on every new project, because they know, through experience, Ferguson dependability and Ferguson performance. Ferguson always means—"A good job done on time."

Any office below can give you authoritative engineering counsel. *Write, wire or 'phone.*

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CINCINNATI: 318 First Nat'l Bank Bldg.
Phone, Main 2739, E. Darrow, Mgr.
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STANDARD AND SPECIAL BUILDINGS



Conventions

Cleveland is a convention city and Hotel Cleveland is the hotel for conventions.

Hotel Cleveland, facing on the Public Square, is at the intersection of south, west and east bound car lines—the terminal of the Interurban service and in close proximity to the main railroad stations and boat landings.

With one thousand rooms and baths, spacious convention halls, banquet rooms, and private dining rooms, it maintains every feature of convenience for convention activities.

Hotel **Cleveland** *Ohio*

Carbon Papers, Please Copy

HOW LONG since you have been in an office where the carbon copy and the filing cabinet had not replaced the old copy book with its water brush and copying press? They still exist in considerable numbers. Reports say that every copying-paper manufactory in Japan, whence comes the best supply of this material, is closed and no hopes for early resumption of production are held out. An acute shortage of copying books which, despite introduction of more approved systems, still are in large demand, is certain.

So American makers of filing systems may profit by a financial crisis in Japan.

Wholesale Capture of Trade Marks

AN interesting story of how the American State Department, assisted by the National Automobile Chamber of Commerce, foiled the efforts of the Portuguese to "pirate" the trade marks of most of the American automobiles and tractors is related by the *New York Times*. International pirating of American trade marks has been a common practice and its prevention is one of the purposes of the new International Chamber of Commerce.

The automobile world was startled when it was discovered last year that by taking advantage of international patent laws Manuel de Silva Carmo had virtually obtained control of the principal marks of Europe and South America for American tractors and cars. Having registered these trade marks in Portugal, Carmo was able, under the terms of the Berne convention, to extend control of the trade marks to other countries where American owners had not already registered their marks. Carmo, at the instance of the State Department, has entered into settlement whereby he has relinquished control of the trade marks in return for what he represents to have been his costs in each case.

Another Step Forward

THE Guaranty Trust Company, of New York, has announced that it will open a branch in Constantinople about September 1st. It is reported that the Guaranty Trust Company has negotiated a lease for a building in Galata, so that it may be properly housed. *Commerce Reports* comments as follows: "The establishment of this branch will fill a want long felt by American business men trading in Constantinople. It will supplement the direct American steamship connections already established, and the work being performed by the American Chamber of Commerce for the Levant, and with the settling of conditions in the Near East can not fail to exert a powerful influence in favor of American trade."

Who Said They Had Paper Houses?

THE George A. Fuller Construction Company is under contract from Japan to the amount of fifty million dollars for buildings, including parliament buildings for the Japanese Government in Tokio. It is reported that they will draw upon the Cleveland district for much of the iron and steel necessary. Engineers and construction men from this district will go to Japan for the work. Reinforced concrete will be the probable construction material.

Wallpapering Greece

We took official notice of a mote in the British industrial eye and overlooked a considerable defect in our own

By CHAUNCEY DEPEW SNOW

Manager, Foreign Commerce Department, Chamber of Commerce of the United States

THE Federation of British Industries, the great British trade association, which seems to be making considerable progress in its self-appointed task of pushing British goods in trade all over the world, last October staged an exposition of British-made goods in Athens, Greece. That exposition—it was the first of a series contemplated for foreign countries—is now furnishing the material for an international game of battle-dore and shuttlecock.

The shuttlecock was first batted by Mr. Alexander W. Weddell, the American Consul General at Athens, Greece. It fluttered across the Mediterranean and the Atlantic to Washington, D. C., in the shape of a report on the exposition. Our Government Department of Commerce printed the report in *Commerce Reports*, and in that form the shuttlecock was knocked back across the Atlantic to England. The respected *London Times* was on the receiving end over there, and has hit it back across the Atlantic again in the shape of a detailed article entitled "British-made Goods at Athens—American Criticism of Exhibition." Catching it on the wing in this form here, we're going to see if we can't keep it in the air a little longer. For our part, we think the British comeback in the *Times* is not half bad, and we want to bat it along to the American manufacturers for their consideration.

Consul General Weddell, describing the exposition, gave it credit for resulting in spot sales and considerable orders for future delivery. That was all right. But he went further, and stated that, "considered in its larger aspects, the scheme in its working out must be considered a failure." The consul general went ahead and compared the thing with some provincial American fairs. The editor of *Commerce Reports* allowed him to get away with it, as follows: "In size alone the exposition fell below the average state fair in America, and in many lines there were indications that the potential market had not been closely or intelligently studied by the exhibitors."

But that wasn't all. As the consul general viewed it:

In many lines exhibits were not of a serious character, being little more than the samples which an active commercial traveler in the United States would carry with him on his usual rounds. Some even fell below this standard. . . . The near eastern market was not properly studied by the British manufacturers before planning their exhibits. For example, in the machinery exhibit not a single cigarette-making machine, not a single machine for cleaning currants was to be seen, nor were there any wood-working machines. Olive and wine pressing machinery was also lacking. Weaving, spinning, and hosiery machines were practically not to be found. On the other hand, massive machinery which could be sold in a highly industrialized country was prominently exhibited. The furniture exhibited was too limited to warrant comment. . . . An attempt was made to push wallpapers, and this in a country where the article is practically unknown. English woolen fabrics were inadequately represented by half a dozen firms. Furthermore, an equally serious drawback to the success of the undertaking was the fact that many of the firms declared themselves ready to take orders for future delivery only, in some cases after many months.

The exposition was disproportionately small, if intended to be truly representative of British manufacturers. There was also a failure to advertise it on an adequate scale. The exposition was opened too soon and before the exhibits were ready.

The esteemed *Times* sent a representative right over to Mr. Bellasis, who was the organizing secretary of the exhibition, and asked him what he had to say. Mr. Bellasis, with all modesty, admitted that there was truth in the statements made by Consul General Weddell, but pointed out, on the other hand, that it was the first all-British exhibition that had ever been held overseas. Moreover, it took place within a year of the date of the armistice, amid difficulties of many kinds which were unavoidable at that period, and, as the American report in question frankly admitted, the greater portion of the exhibits were sold, and large orders were placed for future deliveries.

The organizing secretary then added the following:

We were conscious of many imperfections but our idea was to introduce British goods to Greek prospective purchasers in their own region, and to do this at such a time we had to be content with what was obtainable for the display, rather than to wait for all that we should have liked to show. Although it was a small exhibition, there were nearly 150 stalls, covering in all some 50,000 square feet, and about 150 companies and firms were represented. It was advisable from a commercial point of view to hold the display without delay, for Greece was already being overrun by American agents, and as soon as the barrier against the importation of German goods was removed German commercial travelers poured into the country, seeking and obtaining orders for goods which experience in many cases has shown their employers to be unable to deliver. Of weaving, spinning, and hosiery machines it is true that there was a lack, but British makers were fully occupied in endeavoring to satisfy the home demand, which was exceptionally great at that time. The display at certain of the stands may be regarded as a propagandist effort, made with the idea that Greece desired to develop some of her existing industries and to start enterprises in new fields of production; and the inquiries which some of the exhibitors have received from firms in Greece since the exhibition was closed show this anticipation to have been well founded. The attempt to introduce wallpapers into a country in which they have been unknown hitherto was a decided success.

Two American export managers were playing tennis on a court in New Jersey. One of them displayed admirable form, but the other was a bit ragged on that score. The contest ended in favor of the manager whose tennis form was poorer. The other ventured to suggest to him that he ought to improve his form, and the retort was to the effect that the manager whose technical performance was so good ought to improve his game. That comes pretty close to the moral to be drawn from this present international exchange.

It appears that, though running contrary to form, the British manufacturers delivered the wallpaper (and no small number of other commodities) to the Greeks that have evinced such disregard for wallpaper in the past. It looks as if some of these "American agents" that were "overrunning" Greece had overlooked a bet in not taking along a few rolls of American wallpaper.

WOODEN STEAMERS FOR SALE

Twenty-four United States Shipping Board Steamers

Sealed bids will be received in the office of the United States Shipping Board, 1319 F street, N. W., Washington, D. C., on or before 5 p. m., August 30, 1920. Bids to be opened August 31, 1920, at 10 o'clock in the offices of the Board.

The Steamers Are As Follows:

BALLIN TYPE		
AIRLIE	AWENSDAW	DEVA
ASHBURN	BUTTONWOOD	DIANA
BIRCHLEAF	BUSHONG	DERTONA
DALANA	BUSHROD	MINDORA
THALA	BUTTE	WALLOWA
	BYFIELD	

SPECIFICATIONS on the above vessels are as follows: Length, B. P., 285'; breadth, moulded, 43'; depth, moulded, 26'; loading draft, 23'-2"; designated deadweight ton, approximately 4,000; boilers, 2 Water Tubes; Engine, one triple expansion; I. H. P., 1,500; coal burner—radius, 5,508; speed, 9 knots; bale cargo, 149,750 cubic feet.

DAUGHERTY TYPE	
ALDERMAN	ITOMPA
ARGENTA	NAWITKA
COWARDIN	NEABSCO
HORADO	ZAVALIO

SPECIFICATIONS on the above vessels are as follows: Length, B. P., 300'; breadth, 48'; depth, 28'-6"; loading draft, 24'; designated deadweight ton, 4,700; boilers, 2 Babcock & Wilcox Water Tube; Engine, aft, one triple expansion; I. H. P., 1,450; coal burner—radius, 5,130; speed, 10 knots; bale cargo, 193,200 cubic feet.

TERMS:—10% Cash, Balance Three Years

Further information may be obtained by request sent to the Secretary of the Board.

Bids may be submitted for one or more vessels, or for any combination of vessels, and must be accompanied by certified check payable to the U. S. Shipping Board for 2½% of amount of the bid. Bids should be submitted on the basis of purchase, "as is and where is."

The Board reserves the right to reject any and all bids.

SEALED BIDS should be addressed to the Secretary of the UNITED STATES SHIPPING BOARD, WASHINGTON, D. C., and endorsed, "SEALED BID FOR STEAMSHIP ("Name of Ship") and "Do Not Open."



"One bee working alone can make no Honey"

Says Maurice Maeterlink. It is by working as a *Hive*.

One man working alone can make no Money

THE DICTOGRAPH

System of Interior Telephones

gives to your organization the co-ordination—the working as a "Hive"—that means maximum production.

With the Dictograph on your desk, "The Spirit of the Hive" will pervade your organization. For not only is your finger on the pulse of your entire organization, directing the co-ordinated intelligence that Maeterlink calls the "Spirit of the Hive," but every Department

is in immediate, automatic touch with every other—saving time, friction and temper.

Orders, information, instruction are passed down the line on the minute, errors are reduced to a minimum. Conferences that usually "kill" half the morning before you can get all of your executives together *are held over the Dictograph instantly*, and without a single man's leaving his desk.

Apply the Spirit of the Hive to your organization. We will show you how.

DICTOGRAPH PRODUCTS CORPORATION

C. H. LEHMAN, President

Executive Offices:

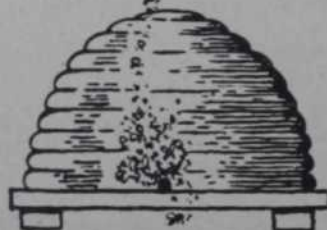
220 WEST 42ND STREET, NEW YORK CITY

Branch Offices in Principal Cities Throughout the World

Essay on Efficiency

We have prepared a non-technical, ten-minute essay on Executive Efficiency. Back of it are many years of study of the executive's problems—many years of experience gotten firsthand from the men who direct the great businesses of the nation. A Signed Copy with my compliments is awaiting you. Simply send in this Corner Coupon on your Letterhead.

C. H. LEHMAN, President.



More Than They Ask For

A NEW IDEA in service is being tried by the United States Bureau of Foreign and Domestic Commerce. Realizing that its functions are to be constructively helpful, rather than administrative, the bureau has taken for its motto this inspiration:

"Let's not only give the business public what it asks for, but give it information it ought to have before it asks for it and while it is fresh enough to be of greatest value."

Another thing the bureau's Far Eastern Division, under F. R. Eldridge, Jr., is attempting to do is to eliminate the waste of time on "fool" inquiries. For many years the bureau has been receiving letters from all kinds of folks asking impossible things, which some of the inexperienced clerks would try to answer regardless of whether the information could be put to practical use.

A man possessed of the brilliant idea of flooding the Chinese market with stockings would write in for a lot of obscure facts, guarding carefully his great secret. He would ask such pertinent questions as the length of the average Chinaman's legs, whether it was cold in Shanghai in May, what colors the Chinese liked, without giving a hint of his purpose. Some well-meaning but misguided clerk at Washington would spend hours in painstaking research and then, fortified with this data, the prospective foreign trader would communicate with a commission house in Shanghai, only to be told that the Chinese don't wear stockings.

When such a letter now comes to the division, polite letters are written in reply asking for what purpose the information is sought.

Much data of an informative nature, but not of sufficient value to be published in commerce reports, is now put out in multigraph form to those particularly interested. This reaches the public within five weeks from the time it is mailed from the Orient.

Times Do Change!

BY STRICKLAND GILLILAN

I USED to drive an ox-team to a plow
Where other boys are chauffing tractors now;
I used to ride upon a logging sled—
A neighbor boy just volplaned o'er my head;
I lived ere they'd discovered gasoline;
I ride around in my own limousine;
My father used to dream of dollar wheat—
Of late the price has had two-fifty beat.

When I was little people used to fret
That into millions ran the nation's debt—
We lend or borrow but in billions now;
When I was young no burly gilt or sow
Was sold for quite a fourth of what you'd pay
For any autocratic runt today;
Our piker hens laid penny eggs, and less,
Yet fifty of them bought a gingham dress.

Now omelets are worth their weight in gold,
And cotton goods at price of silk are sold;
The yokel wears an eighty dollar suit,
With fifteen-dollar shirts and shoes to boot;
The hello maiden sports a sealskin coat
O'er which the Queen of Sheba fain would gloat;
I ate two ten-cent scrambled eggs this mornin'—
Can this be that same world that I was born in?

Surer than the Raised Hand

THE EAST has ways of its own, even in dealing with automobiles. To check reckless chauffeurs, the police of Athens carry planks studded with sharp spikes. When a traffic officer spies a machine that is exceeding the speed limit, he throws his plank, nails up, in the path and nonchalantly arrests the driver when he stops to change tires.



The Public Confidence

An important part of the management of the Bell System is to keep the public informed concerning all matters relating to the telephone.

We consider this an essential part of our stewardship in the operation of this public utility. It is due not only the 130,000 shareholders, but it is due the whole citizenship of the country.

We have told you of new inventions to improve service, of the growth of service, of problems involved in securing materials, employing and training workers, of financing new developments, and of rates necessary to maintain service.

You have been taken into our confidence as to what we

are doing, how we do it, why we do it. You have been told of our efforts to meet unusual conditions; of how we have bent every energy to provide service in the face of storms, floods, fires.

It is an enormous task today to provide adequate service in the face of shortage of workers, raw materials, manufacturing production and transportation.

Nevertheless the service of the Bell System has been improved and extended this year. Over 350,000 new stations have been put into operation. And the loyal workers of the Bell System are establishing new records for efficiency and will establish new records for service.



AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES

One Policy

One System

Universal Service

Cost Accounting Failures!

The hard-headed executive frequently views his cost accounting system as a necessary evil—it seems to be his least effective tool of management.

He is probably right—at best most cost systems are not more than fifty per cent effective. Why? Because there are fundamental errors in design or operation.

The discovery and removal of the causes of inefficiency and failure in cost accounting systems have been for years important features of our professional work.

May we tell you what we have found to be the six outstanding causes of cost system failures?

GRIFFENHAGEN & ASSOCIATES, LTD.

INDUSTRIAL ENGINEERS
ACCOUNTANTS, AND
EMPLOYMENT ADVISORS

116 S. Michigan Avenue CHICAGO

The Presumptuous Business Men

THE BUSINESS MAN is getting on, according to all the old saws about infallible signs of progress. He has now attained the distinction of having a weekly contemporary, which prides itself upon its esoteric standards, cast stones at him and his logic because he ventured to say, with the frankness and honesty that is in him, that budgetary procedure on the part of the federal government would be a mighty good thing.

Stones are not the most deadly weapons in this contemporary's stock in trade. It hurls at the business man the blackest crime known to the professional logicians—the charge of committing a "*non sequitur*!" The very utterance of the charge causes an intense satisfaction. The weekly forthwith glows with self-righteous logic, quite as if it had enjoyed a personal monopoly of the red schoolhouse on the hill, high school, college, and post-graduate seminars, the business man being in the thoroughly despised and unwashed proletariat outside—in fact, belonging to the unspeakable barbarians that want to "business-ize" government.

The business man himself may ignore the harsh words thrown his way, being more intent upon discovering the real cause of the fracas. The secret, it seems, lies in some pet ideas the weekly itself nourishes in its logical bosom.

In the first place, it would prefer the ideal, to wit: Another form of government! While achieving this *summum bonum*, it would trust to the innate and unaided "natural aptitude of American officials, if given a chance, for sound business methods."

In classic phrase, well known in many a school of philosophers, "nough said! One hundred thirty-odd years "natural aptitude" ought to suffice for any country.

The War on Price Agreements

ANOTHER open-price plan has attracted the attention of the Department of Justice. It will be recalled that such a plan as actually conducted in the hardwood industry is already before the courts, by reason of an adverse decision by a federal district judge at Memphis.

The open-competition plan which is now alleged by the Department of Justice to be in violation of the anti-trust laws was started in October, 1918, by twelve companies engaged in producing linseed oil. The plan involved use of an independent bureau. It is the contention of the Department of Justice that the "constructive competition" described in the plan meant competition which does not consist in lowering prices, and that to this end each company entered into definite obligatory service contracts with the bureau, under which each company was to keep secret all information it received through the plan and was to give notice of any change in its own price. Each company deposited Liberty Bonds to assure its performance of its undertakings.

The complaint of the department, filed in the district court at Chicago, follows the course of prices. These prices seem to have been uniform for all participating companies, and after dropping from a base of \$1.60 a gallon in 1918 to \$1.43 early in 1919 advanced to \$2.10 in July, 1919. Later in the year the price fell to \$1.70 but in March, 1920, was at \$1.82.

In the operation of the plan the department contends there was in fact a conspiracy in restraint of trade, in that the natural effect of the force of competition among the companies, which would have tended to reduce prices, was prevented.



Use Maps

that will wash—

Just Like a Slate

THE special cellulose surface of National Maps makes it possible to erase, quickly and completely, any markings or notations made on the map. Use either a sponge or a damp cloth. The surface is left perfectly smooth and clean, and is not damaged in the least. This cellulose surface is an exclusive feature of National Maps.

On these washable National Maps you can mark with either pen, pencil, crayon, or water color paints. Outline your dealer's territories and salesmen's routes. Show sales quotas, statistics, comparative standings, etc. Put down any and all information that will help you to visualize your territory. When changes in this data are necessary, a swipe of a sponge or damp cloth gives you a perfectly clean map, as good as new, ready for further marking.

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is the loose-leaf system applied to maps. Convenient as a book. Puts all your maps within easy reach, ready when you need them, yet completely out of the way

Many of the largest firms in the country are using the Multi-Unit System of Washable National Maps. Among these are: United States Rubber Co., General Motor Acceptance Corporation, Service Motor Truck Co., Cleveland Tractor Co., Monroe Calculating Machine Co., A. G. Spalding Co., Hart-Parr Co., Goodyear Tire & Rubber Co., Armour & Co., Hudson Motor Car Co., Mason Tire & Rubber Co., Lakewood Engineering Co., and many others.

Write for further information about the Multi-Unit System and National Maps for your territory.

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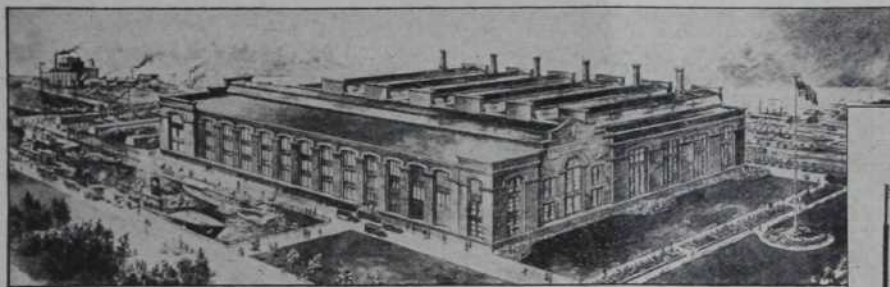
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*The Ultimate Plant*

Built To Meet Expansion— Present and Future

THE growth of a community depends upon the expansion of its industries and the development of its public utilities. Coincident with the exceptional growth of Erie, Pennsylvania, was the determination of the Erie Lighting Company to make its facilities adequate to meet all power and lighting needs.

First a new waterfront site was secured and Day & Zimmermann were authorized to design a 120,000 K. W. plant, that could be built section by section. With reliability of service and overall operating economy in view, the latest ideas of tested engineering practice were everywhere applied.

For expedition Day & Zimmermann opened a local office with a complete engineering and clerical organization for the preparation of detail plans and specifications, purchasing, costkeeping and supervision of construction.

The first section of the power house contains two turbo-generators, one of 10,000 K. W. and one of 7,500 K. W. capacity. Each unit represents practically a complete independent power plant in itself from coal bunkers to outgoing feeders, but cross connected at

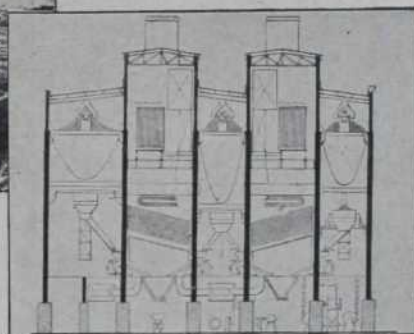
vital points with the adjoining main unit.

The boiler plant consists of six 850 H. P. double end boilers, equipped with stokers, forced draft fans and economizers. Each main flue is provided with duplicate induced draft fans and a short steel stack.

Operating results have been very gratifying, showing an unusually high efficiency in the ratio of coal consumed to each kilowatt hour generated.

Knowledge born of experience and thorough analysis enables Day & Zimmermann to anticipate future developments and discount the accompanying problems.

This is but one phase of a comprehensive service available for any engineering operation.

*Cross Section of First Unit**Firing Aisle**Steel Work**First Unit of Building*

DAY & ZIMMERMANN, INC.

Engineers

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Tycos

TEMPERATURE INSTRUMENTS
INDICATING - RECORDING - CONTROLLING

SPECIALIZATION

EVER increasing recognition is being given to the value of concentration upon the specialized task.

This organization has always centralized its efforts toward one objective: the solution of temperature problems. Results have justified our every exertion in this direction.

Today there are *Tycos* Temperature Instruments—Indicating, Recording, Controlling—for every branch of industry, for every step of manufacturing endeavor. And each instrument scientifically and exactly fits the particular need for which it is intended.

But our work extends further than this. In research, in finding the solution for individual problems of heat control, we have proven our aptitude. We specialize in this work and can be of definite assistance to you.

Tycos Products include:

Indicating Thermometers
Recording Thermometers
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Oil Test Instruments
Household Thermometers
Actinometers
Laboratory Glassware
Compasses



Taylor Instrument Companies
ROCHESTER, N.Y.

There's a Tycos or Taylor Thermometer for Every Purpose

Fabricated Production

E. W. McCULLOUGH, manager of the Fabricated Production Department of the United States Chamber of Commerce, outlined the work proposed for the new department to trade organization secretaries in Chicago and its vicinity at a luncheon held recently at the Union League Club, Chicago. Notwithstanding the fact that the luncheon was held during vacation period, 26 secretaries responded, affording Mr. McCullough an excellent opportunity to explain to these men just what this department proposes to do and to secure their pledges of cooperation in making it successful. Mr. McCullough was very well gratified with the results of the conference. It was suggested that similar meetings would be held at the several other new departments of the National Chamber were organized to acquaint the secretaries throughout the country with the work proposed and to enlist their cooperation.

While in the west Mr. McCullough represented the National Chamber at the decennial of the Forest Products Laboratory at Madison, Wisconsin, on July 22 and 23.

The Public or the Stockholders?

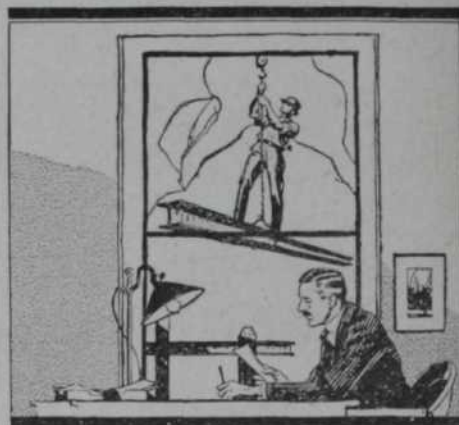
FINANCIAL AID for railroads through the Interstate Commerce Commission out of the revolving fund created by Congress requires a showing that a loan from the fund shall enable a road applying for aid to meet transportation needs of the public and that there is reasonable assurance of repayment to the government.

Recently the commission announced its first decision upon an application, denying the request. It found the communities served were willing to do their part but that, since the road was in good condition and has more equipment than it uses, the loan would inure rather to the advantage of security holders than to the public. According to representations from the road's officials, a slight accession of business would place the company upon a very gratifying basis, but present security holders are unwilling to make further investment.

This seems to have been the point which determined the case in the commission's opinion. It apparently took the position that owners of a road who will not use the principle of self-help cannot expect a loan from the government when the loan will be chiefly useful in getting the company out of receivership. A receiver's sale has no terrors for the commission, which remarks that such an event might "well prove of benefit to the operation of the property by scaling down the present top-heavy capitalization." Suggestions by the road that without the loan it might have to cease operation likewise failed to alarm the commission which observed that under the new law it can prevent abandonment of a railroad.

Railway Automobiles

MOTOR TRUCKS find a field of service in out-of-the-way parts of the world. In Eritrea there is a little narrow-gauge railway built from the coast city Mersa Fatimari to the Abyssinian frontier, a distance of 46 miles. Ten or twelve miles farther inland are the potash deposits in Abyssinia, which are reached by wagon roads. Locomotives originally were used on the railway, but because of the expense and difficulty in securing fuel and water for the boilers, the use of motor trucks with the wheels fitted to the rails has been found less expensive and more practicable. Sixteen motor trucks are now in use.



The Best of Health

Both of these men enjoy the best of health—the man on the girder because of his active out-of-door job, the man at the desk by a different means. He keeps fit by attention to personal hygiene—eats the right sort of food, gets a certain amount of exercise, but particularly—makes certain of securing regular bowel movements.

Nujol helps him.

Nujol works on an entirely new principle.

Instead of forcing or irritating the system, it simply softens the food waste. This enables the many tiny muscles in the walls of the intestines, contracting and expanding in their normal way, to squeeze the food waste along so that it passes naturally out of the system.

Nujol thus prevents constipation because it helps Nature maintain easy, thorough bowel movements at regular intervals—the healthiest habit in the world.

Nujol is absolutely harmless and pleasant to take. Try it.

Nujol is sold by all druggists in sealed bottles only, bearing Nujol trade mark. Write Nujol Laboratories, Standard Oil Co., (New Jersey), 50 Broadway, New York, for booklet, "Thirty Feet of Danger".

The Modern Method of Treating an Old Complaint



Nujol For Constipation

ELECTRICIAN MEETS DEATH

**Carl McDaniel Shocked to Death
at Burton Powder Works**

**Receives Light Shock at a Switch
Which Kills Him**

While throwing on a switch in the factory of the Burton Powder Works, near Coverts station, Carl McDaniel slipped grasping the uninsulated rod of the switch and was instantly killed by the electric shock this morning at 4:30 o'clock.

A current of 440 volts, which under ordinary circumstances would not cause death, passed through the victim's body. It is thought that Mr. McDaniel had a weak heart.

The body was brought to the Rice morgue and an effort was made to locate his home. Papers were found on the man's body addressed from Mason City, Iowa, where he is said to have been before he came to New Castle. He was an electrician and had been in the employ of the company but a short time. As yet the relatives have not been located.



Swift—sure—fatal!

*A shock, a moment's tension,
and he fell back—dead*

SOMEHOW his foot slipped. Falling, he grasped the thing closest to his hand. It was the live blade of an exposed knife switch. Swift, sure, fatal—it shot its heavy current across his heart.

Uncovered, a constant menace—as deadly as a bolt of lightning—it awaits its unwary victims in factories, in public buildings, in homes.

All over the land protest is going up

From everywhere an outcry, in ever-increasing intensity, is heard against the needless waste of life and property caused by the exposed knife switch.

Fire marshals are ruling against it; safety officials are branding it as dangerous; labor unions are denouncing it; electrical societies are condemning it; architects and contractors are blacklisting it; from every side comes the demand from authorities—the exposed knife switch must go.

"The loss of lives and property due to defective electrical installations every year is beyond reason," declares John G. Gamber, State Fire Marshal of Illinois. "The exposed knife switch is the most common unguarded source of electrical trouble in factories," says John A. Hoeveler, Electrical Engineer, Wisconsin Industrial Commission. A total of \$1,183,674 was lost in Michigan during the year 1919 by fires due to defective installation of wires or carelessness in attending," says Fire Marshal Ellsworth of Michigan.

State Fire Marshal H. H. Friedley of Indiana, in ruling against the exposed knife switch, describes it as "one of the most prolific causes of loss of life and property." John S. Horan, State Fire Marshal of West Virginia, has called it "one of the most dangerous

fire and accident hazards in existence." State Fire Marshal L. T. Hussey of Kansas has joined these progressive states with a similar ruling "to protect the lives and property of the State of Kansas."

The Western Association of Electrical Inspectors, in convention at St. Louis January 27, 28 and 29, 1920, went on record without a dissenting vote as being in favor of the use of enclosed switches.

The Square D Safety Switch

The Square D Safety Switch is an absolute safeguard against shock, fire, and industrial accident of any kind.

It is a simple knife switch in a pressed-steel housing—externally operated. A handle on the outside does all the work.

Current cannot reach that handle, nor the box itself—tough, rugged insulation completely isolates all live parts. They are safely enclosed within steel walls.

The switch may be locked in the open position, too, while work is being done on the line; nobody can thoughtlessly turn on the current. This feature is saving many an electrician's life. "On" and "Off" positions

are clearly indicated. The Square D Safety Switch is made in over 300 sizes, types, and capacities—for factories, office buildings and homes.

The greatest remaining hazard around an electrical installation—the exposed knife switch—is going.

All over the country progressive firms—leaders both in employees' welfare and in efficient production—are safeguarding the lives of their workmen and their property by replacing all old-style exposed knife switches with Square D Safety Switches. Prominent among them are:

**The United States Steel Corporation
Pennsylvania Railroad
Standard Oil Company
Pullman Company
Ford Motor Company
The B. F. Goodrich Rubber Co.
U. S. Shipping Board
General Motors Corporation
Bethlehem Steel Company
The White Company**

Listed as standard for both fire and accident prevention by the Underwriters' Laboratories of the National Board of Fire Underwriters. Meets the requirements of the National Electrical Safety Code of the Bureau of Standards, Department of Commerce, Washington, D. C.

The Square D Safety Switch is sold and installed by your electrical dealer and contractor. Architects and engineers are listing it as standard equipment. Ask any of them for further information—or write us direct.

Act NOW and protect your workmen, your family and your property against fire, shocks and other electrical hazards.

SQUARE D COMPANY

1400 Rivard St., Detroit, Mich.
Canadian Factory: Walkerville, Ont.



The dangerous exposed
knife switch



Industrial type
closed

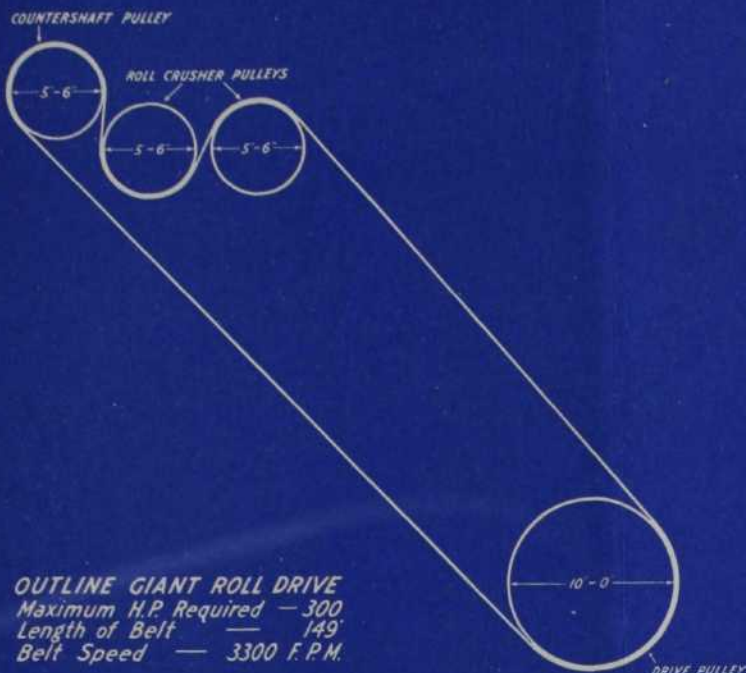


STOP and ask yourself what made the cord tire mean so much to the motorist. The answer is, "Silvertown."

Goodrich Silvertown

America's First CORD TIRE

The Goodrich Adjustment Basis: Silvertown Cords, 8000 Miles; Fabric Tires, 6000 Miles



EDISON PORTLAND CEMENT CO.
 NEW VILLAGE, N. J.

Specified: GOODYEAR BELT
 28" 7 Ply BLUE STREAK

Copyright 1920, by The Goodyear Tire & Rubber Co.

Six Times the Belt Life—And the G. T. M.

Three months was the average life of a belt in the hard, intermittent service of the giant roll drive on the stone crusher in the Edison Portland Cement Company's plant at New Village, N. J.

The power demanded for crunching the limestone, the constant rain of stone dust and bits of rock falling on the belt, and the crusher design that required the use of both sides of the belt, all proved too severe for even the better grades of belting which the Company was using. Some of the poorer ones lasted only two weeks.

The prospect of better service from a belt scientifically specified to that gruelling duty was held out by the G. T. M.—Goodyear Technical Man. The Company co-operated in his work by supplying full information on service conditions.

Among other facts, the following salient features of the giant roll drive were noted by the G. T. M. in his study: the belt drives over the pulley on the first roll, under on the second, and over the driven pulley on the countershaft; all these pulleys are 66" in diameter; the drive shaft pulley is 10' in diameter; the drive inclines at a 45° angle.

He recommended a Goodyear Blue Streak Belt,

28-inch, 7-ply—a great, strong belt, proof against slippage, liable to little stretch, and full of life. It has transmitted full power to the heavy rolls with unfailing certainty. It has ended the troubles of cutting and splicing that other belts developed by their tendency to stretch.

It lasted seventeen months before being replaced by another Goodyear Blue Streak Belt of the same quality and dimensions. Throughout its term of service it gave full measure of dependable, trouble-free, powerful transmission.

These profitable results of Goodyear Belt Service on the giant roll have made the Edison operating officials firm believers in the Goodyear plan of specifying a belt to its work. They have had the G. T. M. make other analyses, and ordered Goodyear transmission, elevator and conveyor belts in accord with his recommendations.

The same service, in G. T. M. knowledge and in these Goodyear Belts that we make to protect our good name, is at your command for a single drive or an entire plant. Write to The Goodyear Tire & Rubber Company, Akron, Ohio, or Los Angeles, Cal., for further information about it.

GOODYEAR
 BLUE STREAK BELTS



“Wherever there’s a road”

Autocar Motor Trucks are daily demonstrating in the hands of thousands of users their ability to haul “wherever there’s a road,” no matter how cramped the quarters or how congested the traffic.

The coal dealer finds the Autocar short wheelbase invaluable for backing into bins and for close quarter deliveries. The manufacturer relies on it for work inside his plant. The retail merchant finds it of advantage in running in traffic and loading in crowded streets.

Chassis (1½-2 Ton)

\$2300 97-inch Wheelbase

\$2400 120-inch Wheelbase

THE AUTOCAR COMPANY, Ardmore, Pa., Established 1897

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Autocar

Wherever there’s a road